

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WISCONSIN

---

GARY SUOJA, Individually and as  
Special Administrator for the Estate  
of OSWALD F. SUOJA, Deceased,

Plaintiff,

v.

OWENS-ILLINOIS, INC.,

Defendant.

---

No. 3:99-cv-00475-slc

OWENS-ILLINOIS, INC.'S  
POST-TRIAL BRIEF

Robert H. Riley  
Edward Casmere  
Joshua D. Lee  
Brian O. Watson  
Riley Safer Holmes & Cancila LLP  
Three First National Plaza  
70 W. Madison Street, Suite 2900  
Chicago, Illinois 60602  
*Attorneys for Defendant  
Owens-Illinois, Inc.*

## TABLE OF CONTENTS

<b>I.</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>II.</b>	<b>LEGAL STANDARD.....</b>	<b>9</b>
<b>III.</b>	<b>PROPOSED FINDINGS OF FACT .....</b>	<b>10</b>
A.	Jurisdiction and Venue.....	10
B.	Oswald Suoja Was a Career Asbestos Insulation Worker. ....	11
C.	Owens-Illinois Made and Sold Its Kaylo Product for a Limited Time Ending on April 30, 1958.....	11
D.	Oswald Suoja Was Not Exposed to Asbestos from Owens-Illinois Kaylo at Badger Ordnance Works.....	12
1.	Badger Ordnance Works.....	13
2.	A&M's Johns Manville 85% Magnesia.....	14
3.	Sprinkmann's Insulation Work.....	17
4.	L&S Insulation's Repair Work .....	21
5.	Coworker Harold Haase's Testimony .....	24
6.	Coworker George Schlub's Testimony .....	26
7.	Coworker Lawrence Zimmer's Testimony .....	30
8.	Stephen Kenoyer's "Expert" Testimony .....	34
9.	Earl Gregory, PhD, CIH's Expert Testimony .....	35
E.	Exposure to Asbestos from Owens-Illinois Kaylo Was Not a Substantial Factor in Causing Oswald Suoja's Disease. ....	36
1.	Oswald Suoja's Cumulative Exposure.....	37
2.	Oswald Suoja's Purported "Kaylo" Exposure.....	39
3.	Stephen Kenoyer's "Expert" Testimony .....	40
4.	Arthur Frank, MD, PhD's Expert Testimony .....	41
F.	Owens-Illinois Kaylo Was Not Defective or Unreasonably Dangerous Based on the State of the Art in the 1940s and 1950s. ....	42
1.	The Threshold Limit Value was recognized as a "safe" level of exposure to asbestos in the 1940s and 1950s.....	42
2.	Insulators like Mr. Suoja were exposed to asbestos at levels below the Threshold Limit Value in place during the 1940s and 1950s. ....	48

3.	Wisconsin and federal law required the asbestos Threshold Limit Value to be enforced at Badger Ordnance Works in the 1940s, 1950s, and 1960s. ....	52
4.	Owens-Illinois understood Kaylo to be a safe product for its intended use during the 1940s and 1950s.....	54
5.	Insulators like Mr. Suoja were not at a known risk of developing cancer in the 1940s and 1950s.....	56
6.	Asbestos was a characteristic ingredient of all high temperature asbestos insulation in the 1940s and 1950s.....	59
7.	Owens-Illinois tested the Kaylo product with Saranac Laboratory in the 1940s and 1950s. ....	60
8.	Owens-Illinois Kaylo was considered to be a “non-toxic” product in the 1940s and 1950s. ....	67
G.	The Lack of Any Warning on Owens-Illinois Kaylo Was Not a Cause of Mr. Suoja’s Asbestos Exposure and Disease.....	68
1.	Asbestos Worker Union Knowledge.....	68
2.	L&S Insulation’s Mask Program.....	71
3.	Earl Gregory, PhD, CIH’s Expert Testimony .....	72
H.	Plaintiff Has No Cognizable Damages Against Owens-Illinois. ....	73
1.	Delores Suoja already recovered for the Estate. ....	73
2.	Kim Suoja admitted there are no remaining damages.....	74
3.	Plaintiff admitted there are no remaining damages. ....	75
I.	Plaintiff’s Claim Is Time-Barred. ....	76
<b>IV.</b>	<b>LEGAL ARGUMENT.....</b>	<b>77</b>
A.	Plaintiff Failed to Prove His Claims by the Greater Weight of the Credible Evidence.....	77
1.	The credible evidence does not show exposure to asbestos from Owens-Illinois Kaylo.....	77
2.	The exclusion of Dr. Frank’s “any exposure that is part of the cumulative exposure” causation theory precludes a finding of substantial-factor causation.....	82
3.	The credible evidence does not show that any claimed exposure to asbestos from Owens-Illinois Kaylo was a substantial factor.....	83
4.	There is no evidence of spoliation by Owens-Illinois.....	85
5.	The credible evidence does not show a culpable design defect.....	86

a.	The presence of asbestos is not a design defect. ....	87
b.	There is no credible evidence that the design of Owens-Illinois Kaylo was unreasonably dangerous. ....	90
6.	The credible evidence does not show a culpable failure to warn. ....	91
7.	The Saranac animal study altered none of the foregoing. ....	99
8.	The lack of a product warning was not a proximate cause of Mr. Suoja's asbestos exposure and injury. ....	102
B.	Plaintiff Failed to Prove Damages by the Greater Weight of the Credible Evidence. ....	106
1.	Plaintiff has no cognizable wrongful death claim. ....	106
2.	Plaintiff and Kim Suoja admit there are no remaining damages. ....	106
3.	Owens-Illinois is not responsible for others' fault. ....	107
C.	Plaintiff's Claims Are Time Barred Under the Federal Enclave Doctrine. ....	111
1.	The federal enclave doctrine applies to Badger Ordnance Works. ....	111
2.	The two-year statute of limitations bars the plaintiff's claims. ....	111
D.	Plaintiff's Failure to Warn Claims Are Barred by the Sophisticated User Doctrine. ....	112
E.	Owens-Illinois Did Not Waive Its Affirmative Defenses. ....	115
F.	Owens-Illinois Has Preserved Its Arguments on Summary Judgment. ....	116
<b>V.</b>	<b>PROCEDURAL AND EVIDENTIARY OBJECTIONS</b> .....	<b>117</b>
A.	Undesignated Prior Testimony .....	117
1.	<i>Humphreys</i> Trial .....	118
2.	Arthur L. Frank, MD, PhD .....	119
a.	Dr. Frank's testimony far exceeded his expert report. ....	119
b.	Dr. Frank's testimony violated <i>Daubert</i> standards. ....	122
3.	Thomas Wiig, MD .....	126
4.	Earl D. Gregory, PhD, CIH .....	128
5.	Elmer Borchardt .....	128
B.	Designated Prior Testimony .....	128
1.	George Schlub .....	128
2.	Lawrence Zimmer .....	129

3.	Elmer Borchardt .....	131
4.	Michael Dowling .....	132
5.	Donald Popalisky (June 13, 1980) .....	133
6.	Donald Popalisky (March 17, 1987).....	134
7.	Elmer Borchardt (May 12, 2003).....	134
8.	Richard Grimmie.....	135
C.	Trial Testimony .....	139
1.	Stephen Kenoyer .....	139
a.	Mr. Kenoyer is not qualified.....	139
b.	Mr. Kenoyer's testimony was not properly disclosed.....	141
2.	Gary Suoja .....	141
3.	Peter Neushul, PhD .....	142
D.	Exhibits .....	142
<b>VI.</b>	<b>CONCLUSION.....</b>	<b>147</b>

## I. INTRODUCTION

The plaintiff's claim is based on negligence and strict liability. Specifically, he alleges 1) negligent or strict liability failure to warn Mr. Suoja that his claimed work in the vicinity of the use of Owens-Illinois Kaylo would expose him to an unreasonable risk of harm, and 2) negligent or strict liability failure to design a reasonably safe insulation product, the claimed defect being the inclusion of asbestos as an ingredient in an asbestos insulation product.

Of course, the plaintiff cannot recover based on mere allegations. He must have proven at trial – with admissible, credible evidence – every element of each claim. At the threshold, he had the burden to prove: 1) that Mr. Suoja was actually exposed to asbestos dust, not just generally, but specifically from Owens-Illinois Kaylo; *and* 2) that any such exposure to Owens-Illinois Kaylo was a substantial factor in causing Mr. Suoja's injury in light of his cumulative exposure to asbestos from other sources over the course of his four-decade career.

The plaintiff failed to carry his burden of proof on both threshold issues. The photographic evidence and construction records show that the insulation products used at Badger Ordnance Works at the relevant times were 85% magnesia asbestos insulation made by Johns Manville, and not Owens-Illinois. The work records show that Mr. Suoja was employed by L&S Insulation at Badger Ordnance Works in 1968 (a decade after Owens-Illinois stopped making Kaylo). Mr. Suoja never testified that he used Owens-Illinois Kaylo, at Badger Ordnance Works or anywhere else, and the plaintiff did not offer Mr. Suoja's prior testimony. His co-workers at Badger Ordnance Works may have uttered

the words “Kaylo” when talking about their own work, but it is clear from their testimony that the insulation product that they described was 85% magnesia – a product that Johns Manville made, but Owens-Illinois did not.

Even the invoices of sales of Owens-Illinois Kaylo to Badger Ordnance Works do not help the plaintiff carry his burden of proof, as those sales took place in 1954, well over a decade before Mr. Suoja’s Social Security records show that he worked at Badger Ordnance Works. Badger Ordnance Works was an enormous worksite—covering approximately 10,000 acres—which used massive quantities of insulation. The invoice data regarding Owens-Illinois Kaylo constituted a fraction of 1% of the total insulation products used there and, more importantly, 0% of the insulation used during the time period when Mr. Suoja was present.

No reasonable inference of exposure to Owens-Illinois Kaylo can be drawn based on the inconsistent, often contradictory, anecdotal recollections of Mr. Suoja’s co-workers. The objective evidence—Social Security records, construction records, photographs, contract ledgers, historical records, invoice data—is not subject to failing memory or bias. The objective proof shows without doubt that Mr. Suoja’s work at Badger Ordnance Works in the late 1960s for L&S Insulation involved insulation products that were *not* made by Owens-Illinois.

Even if the Court were to conclude that there is some evidence that Mr. Suoja had conceivable exposure to some unknown amount of asbestos dust attributable to Owens-Illinois Kaylo, however, the plaintiff has not carried his burden of proving, by the weight of credible evidence, that any such exposure was a substantial factor in causing Mr.

Suoja's injury. The Court excluded under *Daubert* the plaintiff's expert opinion that any fleeting asbestos exposure that contributed to the cumulative asbestos exposure that Mr. Suoja had over a forty-year career was, *ipso facto*, a substantial causal factor. The burden remained with the plaintiff to prove specific causation by some other means. He failed to do so.

Mr. Suoja had decades of cumulative exposure to a vast array of asbestos products at a long list of jobsites. His cumulative exposure is relevant to the question of general causation: was Mr. Suoja's mesothelioma caused by asbestos? Despite the fact that Owens-Illinois did not contest general causation, the plaintiff directed the bulk of his case to this issue.

Specific causation, however, requires the finder of fact to compare the portion of Mr. Suoja's asbestos exposure directly attributable to Owens-Illinois Kaylo (if any) with Mr. Suoja's cumulative exposure over the course of his career. There was no evidence whatsoever offered by the plaintiff that sought to establish the quantum of Mr. Suoja's alleged exposure to Owens-Illinois Kaylo at a single jobsite (Badger Ordnance Works) over a five or six-month period, let alone evidence sufficient to establish that the claimed exposure to Owens-Illinois Kaylo was substantial in comparison to Mr. Suoja's cumulative exposure to asbestos from all sources during his forty-year career.

Despite the Court's *Daubert* ruling, the plaintiff's expert, Dr. Arthur Frank, chose to offer the bromide that any and every source of exposure, no matter how insignificant compared to Mr. Suoja's cumulative exposure, was a "substantial" contributing factor because science has no way of identifying the exposure or exposures that actually caused



the cancer. Dr. Frank simply assumed a conclusion—that any conceivable exposure was a “substantial” causal factor—that science does not support. This is legal advocacy, not reliable science, and provides no evidentiary basis for a finding of specific causation here. The facts remain that, if Mr. Suoja had any exposure to Owens-Illinois Kaylo at all, such exposure was an infinitesimally small portion of his cumulative occupation exposure and there is no admissible evidence that it was a *substantial* contributing cause of his injury.

Even if none of the foregoing were true, the plaintiff’s proof failed with respect to the remaining elements of his causes of action. A failure to warn is not actionable under Wisconsin law, either in negligence or strict liability, unless the defendant knew or should have known, at the time the product was manufactured and sold, that the product was unreasonably dangerous in its intended use without a warning. In this case, the plaintiff had to prove, by the weight of credible evidence, that Owens-Illinois knew or should have known before May, 1958 that its finished Kaylo product presented an unreasonable risk of harm to an insulator when the product was used as intended in the field.

It is undisputed that the only published epidemiological study of insulators like Mr. Suoja during the relevant period reported that 1) the asbestos exposure levels experienced by insulators were below the then-recognized safe level of exposure (the “Threshold Limit Value” or “TLV”) on a time-weighted average basis; 2) the investigators found only three cases of asbestosis and absolutely no cancer among the 1,074 insulators studied; and 3) the insulation trade therefore was “not a dangerous occupation.” It is uncontroverted that an array of industrial hygiene techniques were effective in preventing asbestos exposures above the Threshold Limit Value and that those

techniques were well known to Badger Ordnance Works and Mr. Suoja's union and employers during the relevant period.

The plaintiff offered expert testimony that tried to suggest, with the benefit of 20/20 hindsight, that the Threshold Limit Value was not actually safe because, *only after* 1958, it was discovered that individuals exposed below that level developed asbestosis and cancer. That hindsight-tainted testimony should be rejected in favor of the testimony of three individuals who actually worked for the Wisconsin State Board of Health (William Lea and William Fluck) and the United States Public Health Service (Dohrman Byers) in the 1940s and 1950s. They testified that the Threshold Limit Value was considered to be a "safe" level of exposure for any asbestos-related disease, and Wisconsin law described the Threshold Limit Value as such. Even the plaintiff's experts grudgingly admitted that every published study of insulators like Mr. Suoja reported that insulation work did *not* expose the insulators to asbestos dust above the Threshold Limit Value. It was not until the 1960s that medical science revealed a risk of mesothelioma from asbestos exposure levels below the Threshold Limit Value.

Nor has the plaintiff proven, by the weight of the credible evidence, that it was the absence of a warning label on Owens-Illinois Kaylo in the 1950s that caused Mr. Suoja — a card-carrying member of the "Asbestos Workers Union" — to be exposed to asbestos. There is no evidence whatsoever that Mr. Suoja ever saw a box of Owens-Illinois Kaylo, and there was no way to put a warning label on insulation products out of their box. In the 1960s and 1970s, Mr. Suoja received extensive information from his union, and the researcher it hired (Dr. Irving Selikoff), about asbestos-related disease and how to avoid

it, including the “Grim Reaper” ad in his union journal, but none of that changed his work habits. Even when other manufacturers of insulation products began placing warning labels on their boxes in the mid-1960s due to Dr. Selikoff’s work, there is no evidence that Mr. Suoja’s work practices changed. The notion that a warning label on Owens-Illinois Kaylo is all that stood between Mr. Suoja and an asbestos-free work experience is pure fiction.

The plaintiff fares no better on his claim that Owens-Illinois’s asbestos insulation product had a design defect because it contained asbestos. *Godoy ex rel. Gramling v. E.I. du Pont de Nemours & Co.*, 319 Wis. 2d 91, 110–15, 768 N.W.2d 674, 683–86 (Wis. 2009), holds that a design defect claim based on the presence of a characteristic ingredient in the product fails as a matter of law: “A claim for defective design cannot be maintained where the presence of lead is the alleged defect in design, and its very presence is a characteristic of the product itself. Without lead, there can be no white lead carbonate pigment.” *Id.* at 115, 768 N.W.2d at 685.

There is no admissible, credible evidence in this record that Owens-Illinois Kaylo—or any other high temperature asbestos insulation in the 1940s and 1950s—was or could have been made without asbestos. Asbestos was a characteristic ingredient in the product itself. No manufacturer made the technological advances necessary to make a commercially feasible non-asbestos high-temperature insulation product until the late 1960s and beyond.

Having failed to present credible, admissible proof sufficient to carry his burden on any of these key elements of his claims, the plaintiff repeatedly asks the Court to

indulge in a series of inferences designed to fill the evidentiary gaps. Under Wisconsin law, the Court does not have that license where, as here, the inferences sought are based on speculation and conjecture. *Miller v. Am. Art Clay Co. Inc.*, 28 F. Supp. 3d 825, 831 (W.D. Wis. 2014) (citing *Zielinski v. A.P. Green Indus., Inc.*, 2003 WI App 85, ¶ 16, 263 Wis. 2d 294, 661 N.W.2d 491 (Wis. Ct. App. 2013)); *Alexander v. Auer Steel & Heating Co.*, 2015 WI App 28, ¶ 26, 361 Wis. 2d 284, 862 N.W.2d 618 (Wis. Ct. App. 2015) (citing *Merco Distrib. Corp. v. Comm. Police Alarm Co.*, 84 Wis. 2d 455, 460, 267 N.W.2d 652, 655 (Wis. 1978)).

Facts are facts. The facts here are that the plaintiff presented no credible evidence of exposure to Owens-Illinois Kaylo. Owens-Illinois has presented credible, objective evidence that the insulation products actually used at Badger Ordnance Works for decades—including the late 1960s when Social Security records show Mr. Suoja to have been present—were overwhelmingly 85% magnesia made by Johns Manville. Records of Kaylo sales in 1954, more than a decade before Mr. Suoja worked at Badger Ordnance Works, do not fill this evidentiary gap.

There is no admissible, credible evidence that any conceivable fleeting Owens-Illinois Kaylo exposure experienced by Mr. Suoja during a six-month period in the late 1960s was a substantial factor in causing his disease in light of his forty-year exposure history to a massive array of asbestos products. The “every exposure” theory of causation offered by the plaintiff’s expert was rejected as unreliable, inadmissible speculation. Opinion & Order, dkt. 82; Def.’s Mot. Bar 1, 19, dkt. 27; *Krik v. Owens-Illinois, Inc.*, No. 10-CV-07435, 2015 WL 5050143, at \*1 (N.D. Ill. Aug. 25, 2015) (citing *Krik v. Crane Co.*, 76 F. Supp. 3d 747, 752–55 (N.D. Ill. 2014)).

The claim that Owens-Illinois knew or should have known in the 1940s and 1950s that an insulator like Mr. Suoja was at risk of developing mesothelioma flies in the face of objective published studies reporting that insulators were *not* exposed to asbestos above the then-recognized safe level of exposure, were *not* at a risk of developing cancer, and were *not* in a dangerous occupation.

Nothing in the animal studies conducted for Owens-Illinois at the Saranac Laboratory – which involved massive exposure levels many times greater than the Threshold Limit Value – were designed to or did rebut those published findings. Owens-Illinois presented testimony from its industrial hygienist at the time, Willis (Bill) Hazard, that he read and relied upon the published literature during the relevant time period that insulators like Mr. Suoja were *not* exposed above the asbestos Threshold Limit Value and were *not* at risk of asbestos-related disease.

Under *Godoy*, the plaintiff's design defect claim fails as a matter of law. Asbestos is a characteristic ingredient of asbestos insulation, and the plaintiff presented no evidence to the contrary. 319 Wis. 2d at 115, 768 N.W.2d at 686.

The plaintiff's claims are barred by the applicable statute of limitations, and the plaintiff himself admits having resolved all claims for Mr. Suoja's injury outside this lawsuit, so there are no remaining damages.

The fundamental problem in this case is that, once the Court looks past the bare allegations, there is no "there" there. The plaintiff's attempt to bolster his case with inadmissible evidence, which Owens-Illinois asks this Court to strike, should be rejected. Owens-Illinois respectfully requests that judgment be entered in its favor.

## II. LEGAL STANDARD

Federal Rule of Civil Procedure 52 governs “an action tried on the facts without a jury” and requires the district court to “find the facts specially and state its conclusions of law separately.” Fed. R. Civ. P. 52(a). Thus, the district court must explain the grounds of its decision and otherwise show a “reasoned, articulate adjudication imposed by Rule 52(a).” *Aprin v. United States*, 521 F.3d 769, 776 (7th Cir. 2008) (citing *Jutzi-Johnson v. United States*, 263 F.3d 753, 758 (7th Cir. 2001)).

As the finder of fact, the district court is afforded great deference in deciding the weight and credibility of the evidence. *Carnes Co. v. Stone Creek Mech., Inc.*, 412 F.3d 845, 848 (7th Cir. 2005); *Morisch v. United States*, 653 F.3d 522, 529 (7th Cir. 2011). The district court may “decide whom to believe (and how much to believe) on the basis of the coherence and plausibility of the contestants’ testimony, corroboration or contradiction by other witnesses, and other clues to falsity and veracity.” *Khan v. Fatima*, 680 F.3d 781, 785 (7th Cir. 2012). Indeed, as the Seventh Circuit has explained, the district court’s “credibility determination can virtually never amount to clear error.” *Carnes Co.*, 412 F.3d at 848 (citation omitted).

This Court had a full opportunity to assess the credibility and weight of the evidence. The Court observed, among other things, each witness’s ability and opportunity to see, hear, or know the things that the witness testified about; the witness’s memory; the witness’s interest, bias, or prejudice; the manner of the witness while testifying; the witness’s age; and most significantly, the reasonableness of the witness’s testimony in light of all the evidence in the case. Taken together, the weight of the

admissible evidence showed that plaintiff failed to satisfy his burden and Owens-Illinois is entitled to a judgment in its favor. *See* Fed R. Civ. P. 52(a); *Kahn*, 680 F.3d at 786.

### **III. PROPOSED FINDINGS OF FACT**

Pursuant to Federal Rule of Civil Procedure 52, Owens-Illinois submits its proposed findings of fact based on the weight of the credible evidence.

#### **A. Jurisdiction and Venue**

1. Gary Suoja is a resident of Washington. Trial Tr. 1-P-102:5.
2. Oswald Suoja was a resident of Douglas County, Wisconsin at the time of his death. Ex. 1716, at 1.
3. Owens-Illinois is incorporated in Delaware with its principal place of business in Ohio. Ex. 29, at 3; Ex. 139, at 24–25.
4. Badger Ordnance Works, later known as Badger Army Ammunitions Plant, was located in Sauk County, Wisconsin. Ex. 1762, at 1–2; Ex. 1764, at 1–8; Ex. 1730, at 13.
5. On March 1, 1942, the United States acquired the Badger Ordnance Works land by condemnation, the State of Wisconsin ceded jurisdiction, and the land became a federal enclave. Ex. 1762, at 2 (“Therefore, be it adjudged, ordered and decreed by the Court that the possession and use of all of the land ... is hereby given to the United States of America as of the first day of March, 1942.”); Ex. 1724, at 61 (“The Badger Army Ammunitions Plant land was acquired by the United States for use as an ammunition plant, so under ss. 1.02(intro.) and (1), Wis. States., it is a ‘site for the erection of ... magazines, arsenals, ...’ over which the United States has exclusive jurisdiction as a ‘federal enclave.’”); Ex. 1725, at 58 (same); Ex. 1726, at 50 (same).

**B. Oswald Suoja Was a Career Asbestos Insulation Worker.**

6. Oswald Suoja was a career asbestos insulation worker from approximately 1943 until his retirement in 1985. Ex. 26, at 1; Ex. 1666, at 9; Trial Tr. 1-P-68:8-9.

7. Mr. Suoja became a card-carrying member of the “International Association of Heat and Frost Insulators and Asbestos Workers Union” on January 28, 1944 (Ex. 27, at 26-27), and he proudly called himself an “Asbestos Worker” (Trial Tr. 1-P-119:12).

**C. Owens-Illinois Made and Sold Its Kaylo Product for a Limited Time Ending on April 30, 1958.**

---

8. Owens-Illinois is, and has always been, a glass manufacturing company. Trial Tr. 2-P-13:12-14:9. One of the raw materials in the manufacture of glass is silica. Trial Tr. 2-P-14:14-16. Because of its experience with manufacturing glass products in the 1940s, which are made with silica, Owens-Illinois developed a thermal insulation product, using lime, silica, diatomaceous earth, clay, and approximately 13 to 25% asbestos. Ex. 29, at 7; Richard Grimmie Trial Tr. 29:14-30:6, 33:22-35:19, dkt. 183.

9. Between January 1948 and April 30, 1958, Owens-Illinois commercially manufactured and sold this asbestos thermal insulation product, which was called “Kaylo.” Ex. 139, at 24; Ex. 29, at 7; Ex. 1940, at 1; Grimmie Trial Tr. 29:14-30:6, 33:22-35:19, dkt. 183. Owens-Illinois Kaylo was hard, cementitious, and insoluble in water:





Ex. 1011; Ex. 1012; Ex. 1013; Ex. 1014; Trial Tr. 2-A-108:23-109:20, 2-P-88:2-8.

10. Owens-Illinois ceased the manufacture and sale of its Kaylo product on April 30, 1958, when it sold the Kaylo Division to a separate company, Owens Corning Fiberglas. Ex. 29, at 1, 7, 8; Ex. 139, at 24; Ex. 30, at 1. Owens-Illinois did not manufacture or sell Kaylo, or any other asbestos thermal insulation product, after April 30, 1958. Ex. 29, at 7; Ex. 139, at 1. Between May 1, 1958 and 1972, Owens Corning Fiberglas produced its own “Kaylo” asbestos thermal insulation product. Ex. 1258, at 5156; Ex. 29, at 1, 7, 8; Ex. 30, at 1.

**D. Oswald Suoja Was Not Exposed to Asbestos from Owens-Illinois Kaylo at Badger Ordnance Works.**

11. The weight of the credible evidence does not support the plaintiff’s claim that Mr. Suoja was ever exposed to asbestos from Owens-Illinois Kaylo at Badger Ordnance Works, which is the only jobsite where it is claimed that he had such exposure. Trial Tr. 1-A-19:15-16; Pl.’s Post-Trial Br. 4.

**1. Badger Ordnance Works**

12. Badger Ordnance Works was a government-owned, contractor-operated ammunition plant located on more than 10,000 acres. Ex. 1735, at 7;<sup>1</sup> Ex. 1738, at 4; *see also* Pl.'s Post Trial Br. 8.

13. As explained in the U.S. Army Materiel Command Historic Context Series, Badger Ordnance Works was originally constructed between 1942 and 1945, new facilities for the manufacture of ball powder propellant were built between 1954 and 1955, and the plant ultimately ceased production in 1975:

Construction of the plant began in February 1942. ... Construction stopped on August 13, 1945. ....

During the period 1945 through 1950, various portions of the plant were in surplus, excess, standby, and caretaker status and were maintained by a small compliment of government employees.

In February of 1951, rehabilitation of Badger was begun by the Fegles Construction Company of Minneapolis, Minnesota, under the direction of the Corps of Engineers. ....

On April 30, 1951, the Liberty Powder Defense Corporation of East Alton, Illinois, a subsidiary of Olin Mathieson Chemical Corporation which was later designated as Olin Corporation, became the operator of Badger ....

During 1954 and 1955, new facilities for the manufacture of ball powder propellant were constructed on a "lump sum" bid let by the Corps of Engineers....

On March 1, 1958, the plant was placed in inactive status and remained in this capacity until December 23, 1965, when it was reactivated.

During the inactive period from 1958 to 1965 the plant was maintained in standby status by Olin Corporation. ....

---

<sup>1</sup> Contrary to plaintiff's objection (Pl.'s Post Trial Br. 27), the public documents are not excluded by the rule against hearsay. Fed. R. Evid. 803(8) (public documents); Fed. R. Evid. 803(18) (reliable authority); Fed. R. Evid. 807 (residual exception).

Olin Corporation received official notice to reactivate the plant on January 3, 1966, with the initial powder for this operating period being produced on May 19, 1966....

All production at Badger had ceased by January of 1975, and the plant has remained on standby and modernization status under the management of Olin Corporation since that time.

Ex. 1735, at 7-13.

**2. A&M's Johns Manville 85% Magnesia**

14. When completed, Badger Ordnance Works had a large on-site steam power plant, which provided heat and some power through a network of 200 miles of elevated steam lines to more than 1,400 buildings. Ex. 1734, at 44; Ex. 1738, at 8; Trial Tr. 2-A-106:2-9; Trial Tr. 2-P-90:7-16.

15. As the construction records show, Asbestos & Magnesia Materials Company ("A&M") was the original insulation contractor at Badger Ordnance Works. Ex. 1796, at 185; Trial Tr. 2-A-106:13-108:16. A&M performed both the initial insulation work, which started on August 6, 1942 (Ex. 1796, at 185, 621), and the additional insulation work, which started on July 24, 1944 (Ex. 1796, at 352, 372). When A&M completed only 30 percent of the initial insulation, it had already installed more than 45,000 feet of insulation:

Contract No. 168  
Contractor: Asbestos & Magnesia Materials Co., Chicago, Ill.  
Description: Insulation of outside steam lines.  
Started Work: Aug. 6, 1942  
Scheduled Completion: Open  
Completion at end of month: 30%  
REMARKS: Contractor has covered about 7200 feet of 14 inch steam lines, 4900 feet of 12 inch steam lines, 950 feet of 10 inch steam lines, 7050 feet of 8 inch steam lines, 18,200 feet of 6 inch steam lines and 142 feet of 4 inch steam pipe, 2050 feet of 3 inch and 4900 feet of 2½ steam lines.

Ex. 1796, at 621; Trial Tr. 2-A-106:13-108:6.

16. Badger Ordnance Works was constructed with Johns Manville 85% magnesia asbestos insulation. The photographic evidence from the Badger History Group shows asbestos workers installing Johns Manville 85% magnesia asbestos insulation in 1944:



Ex. 1869, at 1-3; Ex. 1868, at 1-3; *see also* Ex. 1798, at 1-2 (custodian affidavit).

17. The photographic evidence from the National Archives shows the storage room filled with Johns Manville 85% magnesia asbestos insulation in 1944:



Ex. 1793, at 5.



18. As advertised in the classified directories, A&M was a well-known Johns Manville contractor and distributor:



Ex. 1935, at 5, 8, 11, 13, 15, 17, 19, 21, 23, 25, 27, 19, 31;<sup>2</sup> Trial Tr. 2-A-115:11-23.

19. Peter Neushul PhD, an historian who specializes in the history of 20th Century United States technology and science, provided the following opinion about the original insulation at Badger Ordnance Works:

- Q. Were you able to find documents that related to the original contracts for insulation work at the facility?
- A. Yes.
- Q. Have you formed opinions about when that work was done and by whom?
- A. Okay. The Corps hired Hanger & Mason -- Mason & Hanger. Mason & Hanger hired the Asbestos & Magnesium Manufacturing Company of Chicago as the contractor to install Johns Manville insulation on the 200 miles of steam line, of course this is during World War II, at Badger Ordnance Works.

Trial Tr. 2-A-106:10-23, 2-A-115:4-10.

---

<sup>2</sup> Contrary to plaintiff's objection (Pl.'s Post-Trial Br. 30), the classified directories are not excluded by the rule against hearsay. Fed. R. Evid. 803(17) (directories); *see also* Fed. R. Evid. 803, Advisory Committee Notes, 1972 Revision, Note to Paragraph 17 (listing "telephone directories, and city directories" as types of evidence admissible under Fed. R. Evid. 803(17)).

### 3. Sprinkmann's Insulation Work

20. In 1954 and 1955, the ball powder plant was constructed at Badger Ordnance Works (Ex. 1738, at 9; Ex. 1735, at 12; Trial Tr. 2-A-110:19-111:3) and Sprinkmann Sons Corporation was the insulation contractor at the relevant times (Ex. 32, at 1-6; Frank Hofstetter Dep. 8:14-20, 20:22-23, dkt 184).

21. Assuming, for the sake of argument, that the Court overrules Owens-Illinois's objections, the plaintiff introduced five sales invoices from Owens Corning Fiberglas to Sprinkmann at Badger Ordnance Works, during the construction of the ball powder plant. The invoices show shipments of 5,274 linear feet of Owens-Illinois Kaylo from Berlin, New Jersey in May-July 1954. Ex. 32, at 1-6; *see also* Pl.'s Br. 24.

22. There is no credible evidence that Mr. Suoja worked for Sprinkmann during this period or at Badger Ordnance Works during this period. To the contrary, Mr. Suoja's Social Security records show that he worked at Sprinkmann only between 1943 and 1951:

EMPLOYER NUMBER: 39-0628300					
SPRINKMANN SONS CORP					
12100 W SILVER SPRING RD					
MILWAUKEE WI 53225-2912					
1943		345.00	771.00	807.00	\$1,923.00
1944	744.00	878.00			\$1,622.00
1947		328.00	1,688.00	896.00	\$2,912.00
1948		299.00	320.00	504.00	\$1,123.00
1950		1,069.20	1,195.20	735.60	\$3,000.00
1951	64.80	277.20			\$342.00

Ex. 1609, at 1.

23. John Locher, who handled purchasing at Sprinkmann from the late 1940s until his retirement in 1980, testified that the company carried an entire "white line" of asbestos insulation products, which included Kaylo, Johns Manville, Ehret Magnesia, Baldwin-Ehret-Hill, and Calsilite:

Q. When did you first become employed at Sprinkmann & Sons?

A. Well, after World War II, and I think it was May 1st, 1945 or it could have been '46. ....

Q. [Y]ou would agree with them that most likely you are the person who has the best knowledge concerning products Sprinkmann has bought since the late forties?

A. That is correct.

Q. What do you mean when you say "white line"?

A. Well, at this particular temperature material ... is white, and white is Kaylo; it is Johns-Manville material.... It is all white.

Q. Baldwin-Ehret-Hill's material was white line?

A. Oh, sure.

Q. The Calslite you purchased, that is white line?

A. That is correct. White line is basically the material that is -- now, it goes up to about, well, 12 to 1,500 degrees with the exception of mineral wool.

John Locher Dep. 9-11, 38, dkt 188.

24. As Mr. Locher explained, Sprinkmann purchased most of the "white line" asbestos insulation products from Baldwin-Ehret-Hill, then Johns Manville, and then a very minimal amount of Kaylo:

Q. Up until the time Ehret Magnesia had merged with Baldwin-Ehret-Hill [in 1955] what would be your best estimate as to the percentage of the products Sprinkmann bought that were from Ehret Magnesia?

A. Well, we bought probably 95 percent of all our white line -- the white line is the magnesia from Ehret....

Q. If you were to rank the company from which you purchased would Johns-Manville come in second ... in terms of the amount of white line products purchased by Sprinkmann.

A. Since I have been there I would say Johns-Manville would now be second, yes.

Q. Did you purchase more Johns-Manville than Kaylo?

A. Yes. No question about that.

....

Q. Mr. Locher, can you tell me over the years in comparison to the other products you purchased how much Kaylo was purchased by Sprinkmann?

A. Let's see. We had a couple cars of that, or one car from Portage; a very minimal amount really.

*Id.* at 25, 41, 40.

25. Frank Hofstetter, an asbestos worker for Sprinkmann in 1954 and 1955, did not testify that Mr. Suoja was present at Badger Ordnance Works at this time and testified that he insulated pipes with several "white line" insulation products:

Q. Can you tell me what you were doing at Badger Ordinance in the early '50s?

A. Well, we were insulating pipes....

....

Q. So you think it was the early '50s?

A. It was. I think it was, yes. I think it was the early '50s, like '53, maybe '54, '55. Maybe once later on, too

....

Q. You were working for Sprinkmann at the time?

A. Yes.

....

Q. Can you tell me what products you worked with or around at Badger Ordinance, what products you believe contained asbestos that you worked with or around at Badger Ordinance during this time period ....?

A. Well, it was blue mud. The normal stuff, you know, Unibestos, 85% magnesia, Fibre Coat Mastic. Covering and block I mean.

....

Q. Were there any other types of pipecovering out there other than Unibestos?

A. Yeah, there was. I don't know, maybe Calsil or Thermobestos.

Q. Now you mentioned Calsil. Is that a brand name of a product or type of insulation? Can you tell me?



A. I don't know. It was written on the box.

Q. It said Calsil on the box?

A. Yeah.

....

Q. And you also talked about 85 magnesia. Was that mud or pipecovering?

A. Both. There was pipecovering and mud there.

....

Q. Who they were supplied by.

A. Sprinkmann.

Frank Hofstetter Dep. 8:14-20, 20:22-23, 11:24-12:6, 27:17-28:12, 11:24-12:6, dkt. 184.

26. In 1954 and 1955, Mr. Suoja lived in Rockford, Illinois, and worked for McDermaid Roofing & Insulating in Rockford, Illinois:

EMPLOYER NUMBER: 36-1561570					
MCDERMAID ROOFING & INSULATING					
1229 KISHWAUKEE ST					
ROCKFORD IL 61104-4840					
1954			379.50	1,568.10	\$1,947.60
1955	1,899.00	1,860.20	440.80		\$4,200.00
1956	2,004.27	1,955.04	240.69		\$4,200.00
1957	2,053.16	1,658.70	488.14		\$4,200.00
1958	1,766.56	1,775.28	658.16		\$4,200.00
1959	1,959.59	2,049.48	790.93		\$4,800.00
1960	1,934.68	1,940.04	925.28		\$4,800.00
1961	2,198.00	1,984.58	617.42		\$4,800.00
1962	2,099.92	2,281.94	418.14		\$4,800.00
1963	2,162.14	2,362.15	275.71		\$4,800.00
1964	1,846.66	2,238.70	714.64		\$4,800.00
1965	2,717.90	2,082.10			\$4,800.00
1966	3,169.78	2,870.08	560.14		\$6,600.00
1967	3,184.40	3,415.60			\$6,600.00
1968	3,794.79	3,260.50	193.10		\$7,248.39

*Id.* at 5; Trial Tr. 1-P-84:3-5 ("Q. While you were living in Rockford, ... your father worked at McDermaid? A. Yes."); Trial Tr. 1-P-103:7-9.

27. There is no evidence that McDermaid ever worked at Badger Ordnance Works. McDermaid worked in Illinois and very seldom bid in Wisconsin:

Q. Back in the '50s and '60s was McDermott Insulation a competitor of L & S?

A. In a sense, but not really because they worked primarily in their five counties in Illinois; and that was not a region that we wanted to bid

in. They very seldom bid in Wisconsin, and we very seldom bid in Illinois.

Elmer Borchardt Dep. 75:3-9, dkt. 186.

**4. L&S Insulation's Repair Work**

28. In 1959, L&S Insulation began performing repair work as an insulation contractor at Badger Ordnance Works. Ex. 1698, at Book 2, 249.

29. Elmer Borchardt, the president of L&S Insulation, testified that the company kept contract ledger books, which list the contracts in numerical sequence from at least 1947 until the 1970s:

Q. You brought four books today; correct? And they're the contract ledger books of L & S Corporation?

A. Yes.

Q. And we'll get into those in more detail later; but those books, essentially, represent the -- as I understand it, numerical sequence, the contracts that L & S entered into from at least in 1947 until the 1970s; is that correct?

A. That's correct.

....

Q. Okay. And with that, the ledgers you brought here today were business records of L & S; correct?

A. Contract recording dates.

Q. But they are generally business records that L & S kept; correct?

A. Yes.

Q. And they were kept in the ordinary course of your business; correct, and documents prepared by L & S; correct?

A. All of them are there.

Q. But I'm correct, my statement?

A. Yes.

Elmer Borchardt Dep. 5:22-6:6, 25:1-17, dkt. 187.

30. L&S Insulation's contract ledger books show the following insulation work at Badger Ordnance Works:

Book	Page	Contract	Date	Location	Work Performed
2	249	6328	6/4/1959	Badger Ordnance Works - Baraboo, WI	patching & aluminum jacketing
2	263	6422	9/28/1959	Badger Ordnance Works - Baraboo, WI	misc. insulation work
2	265	6436	10/9/1959	Badger Ordnance Works	miscellaneous insulation
3	193	8025	5/6/1966	Badger Ordnance Works Baraboo, WI	miscellaneous insulation
3	194	8035	5/26/1966	Badger Ordnance Works Baraboo, WI	miscellaneous insulation
3	200	8075	7/19/1966	Badger Ordnance Works	miscellaneous pipe & duct insulation
3	203	8099	8/26/1966	Badger Ordnance Works	steam pipe insulation
3	228	8270	6/14/1967	Badger Ordnance Works	miscellaneous insulation
3	241	8364	12/26/1967	Badger Ordnance Works	insulation repairs
3	247	8405	3/5/1968	Badger Ordnance Works Sulfur Storage	tank insulation
4	148	9815	1/8/1974	Badger Ordinance Warehouse	steam pipe insulation
4	286	877	9/1/1978	Badger Ordnance Works	miscellaneous insulation

Ex. 1698; *see also* Ex. 1697 (summary exhibit). All of this work took place at least a year after Owens-Illinois sold the Kaylo Division to Owens Corning Fiberglas. Ex. 30, at 1; Ex. 29, at 1, 7, 8; Ex. 139, at 24.

31. Mr. Borchardt also testified that L&S Insulation used Kaylo brand insulation only on a minority of L&S Insulation's worksites:

Q. Mr. Borchardt, you testified that you did use the brand product called Kaylo as opposed to the general Calsil product that your tickets showed as Kaylo?

A. Yes.

Q. You did use that brand product as well?

A. Yes.

....

Q. Would that have been a substantial number - of the jobs that L & S was doing or a small amount?

A. A minority.

Elmer Borchardt Dep. 59-60, 42, dkt. 185.

32. Mr. Borchardt further explained that "Kaylo" was used as a generic term at L&S Insulation for high-temperature calcium silicate insulation products, which could include Baldwin-Ehret-Hill, Johns Manville, Pabco, or Atlas products:

Q. What did Kaylo mean generically?

A. Calcium silicate.

....

Q. All the products that you bought from BSI in that -- the High Temperature Calsil products were called Kaylo by your company, isn't that true?

A. We list it on the job tickets as Kaylo.

Q. And it could have been the Baldwin-Ehret-Hill, J-M, Pabco or Atlas products that were actually going out to the job, isn't that true?

A. Yes.

*Id.* at 19-20, 42.

33. Assuming, for the sake of argument, that the Court overrules Owens-Illinois's objections, the plaintiff introduced one sales invoice from Owens Corning Fiberglas to L&S Insulation at Badger Ordnance Works in July 1959. The invoice shows one shipment of 122.59 linear feet of Owens Corning Fiberglas Kaylo to Badger Ordnance Works. Ex. 32, at 6. There is no evidence that Owens-Illinois manufactured this Kaylo,

and no reasonable inference can be drawn that, fifteen months after Owens-Illinois sold the Kaylo Division to Owens Corning Fiberglas in an asset purchase agreement, Owens Corning Fiberglas was still selling whatever undetermined amount (if any) of finished Kaylo it bought in April, 1958. Ex. 30, at 1; Ex. 29, at 1, 7, 8; Ex. 139, at 24.

34. There is no credible evidence that Mr. Suoja—who was working for McDermid and living in Rockford—worked at Badger Ordnance Works in 1959. Indeed, there is no evidence that McDermid *ever* worked at Badger Ordnance Works.

35. As Mr. Suoja's Social Security records show, he began working at L&S Insulation in late 1968:

EMPLOYER NUMBER: 39-0925667					
L & S INSULATION CO INC					
PO BOX 14426					
MILWAUKEE WI 53214-0426					
1968			3,572.70	2,871.08	\$6,443.78
1969	3,077.65	3,137.28	1,585.07		\$7,800.00
1970	3,319.96	3,593.60	886.44		\$7,800.00
1971	3,340.48	3,463.88	995.64		\$7,800.00
1972	4,275.82	4,126.81	597.37		\$9,000.00
1973	4,381.46	2,317.44		3,911.67	\$10,610.57
1974	4,257.60	4,548.77	4,393.63		\$13,200.00
1975	5,053.44	5,130.74	3,915.82		\$14,100.00
1976	5,452.09	4,651.28	5,196.63		\$15,300.00
1977	5,461.04	5,849.73	4,957.20	232.03	\$16,500.00
1978	-	-	-	-	\$17,700.00
1979	-	-	-	-	\$22,900.00
1980	-	-	-	-	\$25,900.00
1981	-	-	-	-	\$29,700.00
1982	-	-	-	-	\$28,020.80
1983	-	-	-	-	\$27,631.50

Ex. 1609, at 6.

##### 5. Coworker Harold Haase's Testimony

36. Harold Haase testified by deposition in Mr. Suoja's prior state court lawsuit. Harold Haase Dep. 2:11-20, dkt. 149.

37. In 1969 or 1970, Mr. Haase worked for L&S Insulation with Mr. Suoja at Badger Ordnance Works:

Q. Let me direct your attention then to another place, Badger Ordinance. Are you familiar with that site?

A. Yes.

....

Q. And who were you working for when you were at Badger Ordinance?

A. I was with L&S.

Q. And to the best of your recollection, what time period were you at Badger Ordinance?

A. Oh, I would have to say '69 or '70, somewhere in there.

Q. About how long did that job last?

A. Well, that job went on for about twelve years, but I wasn't there that long. I was only there for a few months.

Q. When you say a few months, you mean --

A. Two or three months, yeah. I had been there and back and there and back.

....

Q. Who was on that job with you?

A. Well, there were 30 or 40 guys on this job too. Gene Hanson was the foreman. There was -- Oh, geeze, let me think here. Gus Pasatok, Ed Holcomb, Bill -- I can't think of his name right now. Well, there was several. Ozzie Suoja was there. There were several others. There were probably 20 or 30 guys.

Haase Dep. 20:24-23:6.

38. Mr. Haase testified that Badger Ordinance Works was a "huge place" and that he did not work alongside Mr. Suoja:

Q. Moving onto Badger Ordinance. That was a huge place. Right?

A. Right.

....

Q. Was [Mr. Suoja] on your crew, or was he working for somebody else?

A. He was just working.... I didn't work along side of him, no.

*Id.* at 64:3-4, 64:16-20.

39. During this time, Mr. Haase repaired old, outdoor, insulation-covered steam lines and installed insulation on tanks, but he admittedly could not identify who made the insulation materials:

Q. Was there any asbestos containing products being used on that job?

A. Yes. All of it.

Q. Can you tell us the type of work that was involved?

A. All pipe covering, then sheet metal.

....

Q. Do you have any recollection on that job of who made the pipe covering?

A. No, I can't really recall.

*Id.* at 22:4-24:18.

#### **6. Coworker George Schlub's Testimony**

40. Assuming, for the sake of argument, that the Court overrules Owens-Illinois's objections, the plaintiff offered the testimony of a second coworker at Badger Ordnance Works, George Schlub, whose testimony was inconsistent with the facts in the case and contradictory. Mr. Schlub's testimony was inconsistent with the objective evidence that 1) Kaylo was an insoluble, calcium silicate asbestos insulation (not an 85% magnesia asbestos insulation); 2) Badger Ordnance was constructed with Johns Manville 85% magnesia asbestos insulation; and 3) white asbestos insulation other than Kaylo was installed at Badger Ordnance Works. *Compare supra* at ¶¶ 12-35 with George Schlub Dep., dkt. 154.

41. Mr. Schlub was 80 years old when he testified, a fellow client of the plaintiff's counsel, and an admittedly biased witness who liked to help out his fellow asbestos workers. *Id.* at 6:3-22, 8:13-17.

42. In 1959, Mr. Schlub worked as an asbestos worker for the first time at Badger Ordnance Works and admitted that Mr. Suoja was not there at that time:

Q. Do you remember what year that was that you started at Badger Ordnance?

A. I got in the trade in 1955, and I – it was probably 1959 when I first went to Badger Ordnance to do work.

....

Q. Mr. Souja was not working with you in 1959, correct?

A. That's correct.

*Id.* at 26:22–27:2.

43. In 1968 (not 1967)<sup>3</sup> – then ten years after Owens-Illinois sold its Kaylo Division – Mr. Schlub returned to Badger Ordnance Works and worked, on and off, approximately five or six months for L&S Insulation with Mr. Suoja:

Q. So your best estimate is that you were working at Badger Ordnance with Mr. Souja around 1967?

A. Yes.

Q. Roughly. Do you know how long a period you and Mr. Souja were working at Badger Ordnance?

A. Off and on, I would say maybe five months, six months.

Q. And for this period of five to six months, were you both working for L&S Insulation?

A. When I worked with Ozzie, yes.

*Id.* at 28:9–20.

44. Mr. Schlub repaired old outdoor insulation-covered pipes—where the insulation was “deteriorated,” “hanging there,” and “weathered” from the rain—which was consistent with soluble 85% magnesia asbestos insulation:

---

<sup>3</sup> As noted above, Mr. Suoja did not begin working for L&S insulation until 1968, and Mr. Schlub’s testimony was not correct about 1967. Ex. 1609, at 6.



Q. What were you doing there?

A. We were repairing insulation-covered pipes where the weather had gotten to it and the weather-proofing had -- the weather-proofing had fallen off, and they -- the materials, *insulating materials, were deteriorated and we had to remove them and replace them with new insulation.* And there was also some new construction that was going on too that we worked on too. It was new work, and we had to insulate that too. But mostly it was removing or re-weather-proofing insulation materials that were on the pipes already.

....

Q. How did you remove the insulation?

A. How would we remove it? We would cut the -- The insulation is wired on, and we had to cut the wires. *It was deteriorated and hanging there,* and the weather-proofing was mostly gone. We had to cut it down with our nippers and let it fall to the ground, you know.

....

Q. What about the deteriorated insulation?

A. Deteriorated stuff, the weather-proofing had been -- *had weathered and was falling off and the insulation was weathered. It was rained on and had dirt on it and stuff from dust blowing around the fields there,* and it had a real dirty-looking appearance.

*Id.* at 12:1-22, 14:15-21, 24:5-11.

45. Although Mr. Schlub called the asbestos insulation "Kaylo," he also testified that "Kaylo" was 85% magnesia asbestos insulation:

Q. Do you recall whether or not Kaylo was an 85 Magnesia product or a calcium silicate product?

A. It was 85 percent or whatever.

*Id.* at 31:18-23.

46. Mr. Schlub went on to testify that "Kaylo" was different than calcium silicate asbestos insulation:

Q. How about a calcium silicate pipe covering? Can you describe what that looks like?

- A. Cal-sil was similar, but it had *different* characteristics. It had *different* coloration and composition than Kaylo.

*Id.* at 34:3-7.

47. Mr. Schlub believed the asbestos insulation at Badger Ordnance Works was "Kaylo" because it was "bright," "white," "chalky" material, which he associated with 85% magnesia asbestos insulation and not calcium silicate asbestos insulation:

Q. How do you know it was Kaylo?

A. Because I worked with Kaylo and I knew what it looked like. *It was white, chalky.* It was very distinctive in the texture of it. I could tell by the texture and the composition that it was Kaylo because I was familiar with Kaylo, so it was something that I had always worked with.

....

Q. Now, you had mentioned when counsel was asking you questions that you could tell what the brand of the pipe insulation was that you were removing at Badger Ordnance; do you recall that?

A. I recall after tearing it off and seeing the *bright chalky material* that was left after I removed all the weather material, I could tell that that was Kaylo.

....

Q. Can you describe for me what an 85 Magnesia pipe covering looks like?

A. It's made of a substance that looks like *chalk*. It's formed to fit the pipe. When you work with it, it gives off dust, and the appearance is *real white* when the material is new.

....

Q. So your testimony is that cal-sil was not as bright white as 85 Mag?

A. To my recollection, that's true.

*Id.* at 19:4-10, 34:21-35:4, 33:21-34:2, 34:18-20.

48. Mr. Schlub's testimony cannot be reconciled with the testimony of Ralph Van Beck, an asbestos worker from 1947 until 1966 and a former vice president of thermal

insulation at Sprinkmann, who testified there was no way to determine the manufacturer of asbestos insulation when it has been installed on the pipe line:

- Q. Am I right that after a thermal product had been installed on a job site, you could not tell the manufacturer?
- A. That's probably correct.
- Q. For example, when you're insulating a pipeline, you would put the pipe insulation on. You would maybe wire or twine it. You would put cheesecloth. And you would put cement all on top of that pipeline.
- A. Yes.
- Q. You might even use a mastic as well?
- A. You might.
- Q. Would there be any way, as you looked at a[n] insulated pipeline, to determine the manufacturer of any of those products?
- A. No. Not that I'm aware of.

Ralph Van Beck Dep. 9:17-10:16, 107:4-110:4 (objections omitted), dkt. 190.

49. Additionally, Mr. Schlub's testimony cannot be reconciled with the testimony of Harold Haase, a career asbestos worker and fellow client of plaintiff's counsel, who testified that you could not identify the manufacturer out of the box:

- Q. I'm asking you to compare Unibestos to another cal-sil product like Thermobestos.
- A. If you took them out of a box, you wouldn't be able to tell the difference, I don't think.

Harold Haase Dep. 48:7-14 (objection omitted), dkt. 149.

## **7. Coworker Lawrence Zimmer's Testimony**

50. Assuming, for the sake of argument, that the Court overrules Owens-Illinois's objections, the plaintiff introduced the deposition testimony of a third coworker at Badger Ordnance Works, Lawrence Zimmer. His testimony was also inconsistent with the objective evidence. *Compare supra* at ¶¶ 12-35 *with* Lawrence Zimmer Dep., dkt. 155-

56. Most notably, however, Mr. Zimmer did *not* testify that Mr. Suoja ever worked with or around Owen-Illinois Kaylo at Badger Ordnance Works. *Id.*

51. Mr. Zimmer's testimony was inconsistent with the objective evidence that 1) Mr. Suoja worked for McDermaid (not L&S Insulation) in late 1958; 2) L&S Insulation did not work at Badger Ordnance Works in late 1958; 3) Badger Ordnance Works was constructed with Johns Manville 85% magnesia asbestos insulation; and 4) white insulation products other than Kaylo were installed at Badger Ordnance Works. *Compare id. with supra* at ¶¶ 12-35.

52. Mr. Zimmer was 73 years old when he testified, had suffered from Parkinson's disease during the last 12 years, and was a fellow client of plaintiff's lawyer. Zimmer Dep. at 9:5-6, 10:19-20, 40:1-3.

53. In 1958, Mr. Zimmer joined the Asbestos Workers Union as a helper-apprentice and started working for L&S Insulation:

Q. I understand that you joined -- joined the union in 1958?

A. Yes.

....

Q. Okay. Did you have any apprenticeship?

A. Well, they called us helpers at that time. The apprenticeship program was inaugurated at my joining.... They swore me in, and then they passed the -- what you call it. That I think was a four-year apprenticeship program from then o[n].

....

Q. What local?

A. 19.

Q. Where is that out of?

A. Milwaukee.

....

Q. Who were you working for?

A. L & S.

*Id.* at 55:19–56:6, 13:9–17.

54. Mr. Zimmer’s claim that he worked as a helper-apprentice at Badger Ordnance Works in “Late ‘58” (*id.* at 25:13–18) is contradicted by L&S Insulation’s contract records, which establish that L&S Insulation did not work there until June 4, 1959 (Ex. 1698, at Book 2, 249; Ex. 1697, at 1 (summary exhibit)).

55. Mr. Zimmer speculated that “Kaylo” was being removed at Badger Ordnance Works, because it was “smooth and white,” but he admittedly did not perform the work:

Q. Could you tell what brand of insulation was being removed, or can you tell us what brand of insulation was being removed out there?

A. It was Kaylo.

Q. How do you know?

A. Because it was smooth and white.

....

Q. Did you do that work out there?

A. No.

Q. Did you help to remove the Kaylo?

A. No, I did not. I was an apprentice then.

Q. Were you --

A. I wasn't allowed to touch tools.

*Id.* at 25:22–27:1. Mr. Zimmer never claimed that Owens-Illinois made those “Kaylo” products.

56. In prior sworn affidavits, Mr. Zimmer contradicted his deposition testimony and attested that he used *other* asbestos insulation products – including Kaiser

M-Block insulation, Armstrong Armabestos pipecovering, and USG/A.P. Green insulation – during this time at Badger Ordnance Works:

<b>PRODUCT LIST:</b>					
A. Plastic K-N, KK-N, Ram used at Steel Mills			E. Plastic Insulation Cement		
B. KR 1202/ 1204 M/C Brick-Metal Encased Firebrick			F. Vee Block Mix/Castable Insulating Cement		
C. M- Block Insulation			G. Kaiser Mineral Wool Cement		
D. Hard Top Finishing Cement- Mud			H. Super D block Insulation (6% Amosite)		
I was exposed to the Kaiser Aluminum & Chemical asbestos-containing products identified above while working at the below sites:					
Fill in tables below and circle the letters that correspond to the products above. <b>CIRCLE BELOW:</b>					
Location	City	State	From	To	Products
Badger Ordnance Works	Baraboo	WI	1957	1960	A B <u>C</u> <u>D</u> <u>E</u> F G H

Ex. 1182.<sup>4</sup>

<b>PRODUCT LIST:</b>					
A. Armaspray			D. Armabestos Pipecovering		
B. Asbestos Cement			E. Sprayed Limpet Asbestos		
C. Accobest Gaskets			F. Asbestos Vinyl Floor Tile		
I was exposed to the Armstrong asbestos-containing products identified above while working at the below sites:					
Fill in tables below and circle the letters that correspond to the products above. <b>CIRCLE BELOW:</b>					
<b>WORK HISTORY:</b>					
Location	City	State	From	To	Products
Badger Ordnance Works	Baraboo	WI	1957	1960	A. B. C. <u>D</u> E. F.

Ex. 1174.

1. Site/Plant where exposure occurred:	
Name of Site/Plant of Exposure: <u>Badger Ordnance Works</u> , or if this site is on the approved USG/A.P. Green site list, enter the Site Code from Exhibit A (available on website): _____ (if a Site Code is entered, please skip to question 2)	
City: <u>Baraboo</u>	
State/Province: <u>WI</u>	
Country: _____	
If this exposure involved <b>USG/A.P. Green</b> product(s) or conduct, list the names of the products or the name of the contractor and nature of the conduct to which the injured party is alleging exposure and provide the evidentiary basis for the claim that USG/APG products/conduct were at that site.	
_____	
_____	
2. Date Exposure Began: <u>01/1958</u> (mm/yyyy)	Date Exposure Ended: <u>12/1958</u> (mm/yyyy)
3. Occupation at Time of Exposure (e.g., Boilermaker, Laborer, etc.): <u>Asbestos Worker</u>	

Ex. 1188.

<sup>4</sup> As noted at the deposition, the plaintiff's counsel had not produced Mr. Zimmer's bankruptcy affidavits in response to discovery. Zimmer Dep. 8:3-14, dkt. 155.

**8. Stephen Kenoyer's "Expert" Testimony**

57. Assuming, for the sake of argument, that the Court overrules Owens-Illinois's objections, the plaintiff also offered the testimony of a purported industrial hygiene expert, Stephen Kenoyer. He also did not testify that Mr. Suoja was exposed to asbestos from Owens-Illinois Kaylo at Badger Ordnance Works. Trial Tr. 1-A-42:12-92:24. In fact, contrary to Mr. Schlub's and Mr. Zimmer's testimony, Mr. Kenoyer testified that someone cannot identify the manufacturer of insulation on a pipe:

Q. You agree that when you look at insulation on a pipe, you can't tell who manufactured it?

A. Generally, yeah. There may be instances where you might see a label on it, but generally I would agree with you.

....

Q. This photograph of this block material from the presentation [Ex. 137], is that asbestos containing or not?

A. I would have to sample it to be able to positively ID it.

Q. Is that calcium silicate or 85 magnesia?

A. I don't know.

Q. What year was this manufactured?

A. I don't know. It's just used as a example.

Q. Who manufactured it?

A. I don't know.

Q. You can't tell just by looking at it, can you?

A. No.

Q. Same question. This insulation, the half round that was in your presentation [Ex. 137], is that same answers?

A. Same answers.

Q. You can't tell what it is or who made it or when; right?

A. That's correct.

Trial Tr. 1-A-110:24-111:3, 1-A-95:12-96:5

58. Additionally, Mr. Kenoyer testified that he and many other people confuse the manufacturers of "Kaylo":

Q. As of a few days ago, you associated the product Kaylo with a manufacture[r] called Pittsburgh Corning; right?

A. Yes, I did get that confused with the other Illinois. I always get those confused.

Q. Lot of people do apparently.

A. Yeah.

Trial Tr. 1-A-111:14-20.

**9. Earl Gregory, PhD, CIH's Expert Testimony**

59. Earl Gregory, PhD, CIH, a certified industrial hygienist with uncontested credentials, testified that, based on the objective evidence in this case, Mr. Suoja was not exposed to asbestos from Owens-Illinois Kaylo:

Q. We first asked you to evaluate whether Mr. Suoja was ever exposed to asbestos from Owens-Illinois Kaylo.

A. That's correct.

Q. What was your conclusion?

A. My conclusion, based on all the testimony and the documents that I've reviewed in this case, was that there was no evidence that he was exposed to asbestos from Owens-Illinois thermal insulation products.

....

Q. How did you reach that conclusion ... of whether Mr. Suoja was ever exposed to an Owens-Illinois product?

A. Mr. Zimmer, for example, said he worked with Mr. Suoja in late 1958, but he didn't indicate that Mr. Suoja was working with any Owens-Illinois Kaylo products. He just stated that Mr. Suoja was at the jobsite. And of course the jobsite is around 7,500 acres with over 1,400 buildings. So but Mr. Zimmer didn't say that he saw Mr. Suoja remove or install any Owens-Illinois thermal insulation products. So there's just no evidence from his testimony that Mr. Suoja was working with any O-I thermal insulation products.....



And then for George Schlub, he indicated that he worked with Mr. Suoja at the Badger facility in around 1967 for on and off maybe five to six months. And he indicated that -- Mr. Schlub stated that he removed what he felt was Kaylo insulation from piping. And he defined the Kaylo insulation as 85% magnesia. And Kaylo is a calcium silicate thermal insulation product and it's not an 85% magnesia product. There are two different types of thermal insulation products.

And he based his opinion that he was removing Kaylo on the fact that other insulators stated that in the 40s the Kaylo was installed when the facility was being built. But in fact O-I Kaylo was not commercially available until 1948, and we know that the Badger facility was up and running in January of 1943, so it couldn't have been Kaylo that was installed during the initial construction of that facility.

And, also, Kaylo is not an 85% magnesia product; it's a calcium silicate product. And he indicated that the purpose -- Mr. Schlub indicated that the purpose of his activities during that time period at the Badger facility was to recover damaged and weathered pipe insulation that had been exposed to rain and dust from dust blowing in the fields outside where the pipe covering existed. And he described the insulation as weathered and falling apart and deteriorated. But calcium silicate products, which included the Kaylo, the O-I Kaylo product, is not soluble in water and it doesn't break down in water and it stands up very well to weather conditions, including high humidities and rain and those kind of elements; whereas 85% magnesia, by definition, is 85% magnesium carbonate, which is soluble in water. ...

Trial Tr. 2-P-82:2-9, 2-P-86:1-88:8.

**E. Exposure to Asbestos from Owens-Illinois Kaylo Was Not a Substantial Factor in Causing Oswald Suoja's Disease.**

---

60. Because the weight of the credible evidence does not show any exposure to asbestos from Owens-Illinois Kaylo, there is no credible evidence that exposure to asbestos from Owen-Illinois Kaylo was a substantial factor in causing Mr. Suoja's disease. Even assuming, for the sake of argument, the plaintiff's evidence (over objection) shows

some fleeting indirect exposure to asbestos from Owens-Illinois Kaylo at Badger Ordnance Works, the evidence does not support a finding of substantial factor causation.

**1. Oswald Suoja's Cumulative Exposure**

61. Mr. Suoja had a forty-year cumulative exposure to asbestos from approximately 1943 until December 1984. *E.g.*, Ex. 1655, at 7; Ex. 1194, at 7 ("Plaintiff admits the truth of any documents about exposure to asbestos products which are contained in the bankruptcy trust submissions.").

62. In bankruptcy trust submissions, Mr. Suoja's estate admitted that he sustained asbestos exposure from a long list of products and jobsites:

- Precision Magnesia asbestos cement at Butler Shipyards where Mr. Suoja worked 12 to 14 hours a day, six days a week, from 1943 until 1945, covering all pipes they have in the warship. Ex. 1666, at 3, 9; Ex. 1194, at 7.
- Babcock & Wilcox asbestos products between 1943 and 1984. Ex. 1662, at 1; Ex. 1194, at 7.
- Celotex Corporation asbestos products from 1952 until 1954 at the Milwaukee House of Corrections, from 1951 until 1952 at Tanners Creek Power, in 1960 at Sundstrand, and at Badger Ordnance Works. Ex. 1675, at 5-8; Ex. 1194, at 7.
- Eagle-Picher Industries asbestos products. Ex. 1665; Ex. 1194, at 7.
- Fiberboard asbestos products from January 1951 until January 1952 at Schlitz Brewery and from 1943 until 1945 at Butler Shipyards. Ex. 1666, at 3, 9; Ex. 1194, at 7.
- Flintkote Company asbestos products. Ex. 1194, at 7-8.
- H K Porter Company asbestos products from January 1, 1943 until December 31, 1984. Ex. 1655, at 7; Ex. 1194, at 7.
- Johns Manville asbestos products. Ex. 1678; Ex. 1194, at 7.

- National Gypsum Company asbestos products from January 1, 1951 until December 31, 1979. Ex. 1654, at 1; Ex. 1194, at 7.
- Owens Corning Fiberglas asbestos products. Ex. 1194, at 7-8.
- Raytech Industries Incorporated asbestos products. Ex. 1660; Ex. 1194, at 7.
- Rockwool Manufacturing Company asbestos products. Ex. 1194, at 7-8.
- Union Asbestos & Rubber Co. (UNARCO) asbestos products. Ex. 1672; Ex. 1194, at 7.

63. In a sworn “affidavit of exposure,” Mr. Suoja’s Estate also admitted that he was exposed to asbestos from General Electric turbines or steam lines connected to General Electric turbines at Indiana Michigan Power Co. between 1948 and 1955. Ex. 1669, at 1.

64. Additionally, in a prior state court lawsuit, Mr. Suoja’s estate admitted that he sustained exposure from a litany of asbestos products. Before the plaintiff’s lawyers “lost” the litigation file from the prior state court lawsuit (Stipulation, dkt. 171),<sup>5</sup> Mr. Suoja’s estate admitted that he was exposed to asbestos from:

- Pittsburg Corning asbestos products. Ex. 1620, at No. 43.
- Rapid American Corporation asbestos products. Ex. 1620, at No. 47.

---

<sup>5</sup> Under Fed. R. Civ. P. 37, the Court should draw a permissive inference that the records from the prior state court lawsuit would have been unfavorable to plaintiff. *See* Def.’s Br. 3-4, dkt. 131; *Domanus v. Lewicki*, 742 F.3d 290, 299 (7th Cir. 2014) (“bad faith” is not required); *Marrocco v. Gen. Motors Corp.*, 966 F.2d 220, 224 (7th Cir. 1992); *Mathis v. John Morden Buick, Inc.*, 136 F.3d 1153, 1155 (7th Cir. 1998); *Brown & Williamson Tobacco Corp. v. Jacobson*, 827 F.2d 1119, 1134 (7th Cir. 1987). Every factor is satisfied here: 1) the plaintiff had a duty to preserve the state court files during this litigation; 2) the plaintiff’s conduct was unreasonable and falls squarely within the “fault” category; and 3) Owens-Illinois has been severely prejudiced without the state court records. *See* Def.’s Br. 3-4, dkt. 131.

- Unibestos asbestos products. Ex. 1620, at No. 62.
- Walker-Jamar asbestos-containing jobsites. Ex. 1620, at No. 81.
- McDermaid asbestos-containing jobsites. Ex. 1620, at No. 82.
- Weil McLain asbestos-containing boilers at Milwaukee County Stadium. Ex. 1621, at No. 34.
- large quantities of asbestos products from A.P. Green Inc., ACandS Inc., Allied Insulation Supply Co. Inc., API, Inc., Armstrong Cork Co., Armstrong World Industries Inc., Asbestos Claims Management Corp., Building Services Industrial Sales Co., Inc., Crown Cork & Seal Co., GAF Corporation, Garlock Inc., Johns Manville Corporation, L&S Insulation Company Inc., Mundet Cork Co., National Gypsum Corp., Owens Corning Corp., Philip Carey Manufacturing Co., Pittsburgh Plate Glass Co., Pittsburgh Corning Corporation, PPG Industries Inc., Rapid American Corp., Raybestos-Manhattan, Inc., Raymark Corp., Sprinkmann Sons Corporation, and United States Gypsum Corp. Ex. 1618, at ¶¶ 12, 14, 41.<sup>6</sup>

## **2. Oswald Suoja's Purported "Kaylo" Exposure**

65. By contrast, the plaintiff's evidence showed that Mr. Suoja worked only five or six months (less than 1.25% of his 40-year exposure history) at Badger Ordnance Works. The only conceivable potential exposure to Owens-Illinois Kaylo is invoices (which is not proof of actual exposure) showing that in 1954 (thirteen years before Mr. Suoja worked at Badger Ordnance Works) 5,274 linear feet of Owens-Illinois Kaylo was shipped to that site. That amount of Owens-Illinois Kaylo would constitute less than .5% of the 1,056,000 linear feet (or 200 miles) of insulated overhead steam lines (assuming each line was insulated only once and never repaired and re-insulated with other

---

<sup>6</sup> See *Enquip, Inc. v. Smith-McDonald Corp.*, 655 F.2d 115, 118 (7th Cir. 1981) ("[An admission] from one proceeding is indeed admissible and cognizable as an admission in another.").

products). Ex. 1734, at 44; Ex. 1738, at 8; Trial Tr. 2-A-106:21, 2-P-90:15-16. There is no evidence in this record to show where at Badger Ordnance Works any of the Owens-Illinois Kaylo was used, who installed it, how long it remained in place, or when it was removed (if ever) and by whom.

### **3. Stephen Kenoyer's "Expert" Testimony**

66. Assuming, for the sake of argument, that the Court overrules Owens-Illinois's objections, Mr. Kenoyer did not testify that any claimed exposure from Owens-Illinois Kaylo was "substantial" in view of Mr. Suoja's cumulative exposure to asbestos. Trial Tr. 1-A-42:12-92:24.

67. Mr. Kenoyer performed no dose assessment to compare any exposure from Owens-Illinois Kaylo against Mr. Suoja's cumulative exposure:

Q. You made no attempt to break out any of the exposures to any type of product in this case?

A To a specific product, no.

Q You did not try to calculate what a 40-year total dose exposure would have been for Mr. Suoja.

A No.

....

Q. You didn't do any sort of the case-specific exposure dose calculation at all?

A No.

Trial Tr. 1-A-111:11-13, Trial Tr. 1-A-113:17-22.

68. Instead, Mr. Kenoyer explained that his opinion rests on the belief that "[a]ny exposures above background is significant." Trial Tr. 1-A-110:11-15. This theory, and any testimony based on this theory, was excluded under *Daubert*. Opinion & Order, dkt. 82; Def.'s Mot. Bar 1, 19, dkt. 27.

**4. Arthur Frank, MD, PhD's Expert Testimony**

69. Assuming, for the sake of argument, that the Court overrules Owens-Illinois's objections, the plaintiff's causation expert, Dr. Arthur Frank, did not offer any opinion that Mr. Suoja was exposed to asbestos from Owens-Illinois Kaylo, let alone a specific-causation opinion that exposure from Owens-Illinois Kaylo was a substantial contributing factor in causing Mr. Suoja's disease. Arthur Frank, MD, PhD Dep., dkt. 165.

70. Although Dr. Frank testified that it was scientifically possible to perform "a dose reconstruction, try to estimate what the exposure was" (*id.* at 69:21-23), he did not perform any dose reconstruction for Mr. Suoja's asbestos exposure or compare any exposure from Owens-Illinois Kaylo against Mr. Suoja's cumulative exposure from all sources during his forty-year career.

71. Like Mr. Kenoyer, Dr. Frank explained his belief that any and every exposure—no matter how minimal, no matter in what circumstances—is a substantial exposure:

Q. [I]t doesn't matter what type of asbestos, how much he was exposed, how long, or what type of exposure it was, correct?

A. None of the above.

....

Q. And you can't say that one was insubstantial and one was substantial?

A. They were all substantial scientifically.

....

Q. [E]ssentially it's your opinion that the only exposure that a person has that is not causative in their asbestos-related disease is the exposure that they didn't have it?

A. Right....

Q. But if they have an exposure, no matter how slight, no matter how minimal, your opinion is that that is part of the cause of the disease?

A. It's part of their cumulative exposure.

Q. And thus the cause?

A. And thus the cause because it is the cumulative exposure that is the cause.

Q. And that's true in your mind and in your opinion even for a single exposure on a single day?

....

A. The answer is yes.

*Id.* at 86:1–4, 99:13–15, 97:18–98:12, 99:16–100:2. This causation theory, and any testimony based on this theory, was excluded under *Daubert*. Opinion & Order, dkt. 82; Def.'s Mot. Bar 1, 19, dkt. 27.

**F. Owens-Illinois Kaylo Was Not Defective or Unreasonably Dangerous Based on the State of the Art in the 1940s and 1950s.**

72. Even if the plaintiff had proven exposure and substantial factor causation, the credible evidence does not support a finding that Owens-Illinois Kaylo was defective or unreasonably dangerous, because it lacked a warning label, based on the medical and scientific state of the art in the 1940s and 1950s.

**1. The Threshold Limit Value was recognized as a "safe" level of exposure to asbestos in the 1940s and 1950s.**

73. It was understood in the 1940s and 1950s that people would not suffer any adverse health effects if their asbestos exposure levels were below the then-recognized "safe" level of exposure (the Threshold Limit Value) on a time-weighted average basis. Willis Hazard Dep. 110–112, 116, dkt. 150.

74. In 1946, the American Conference of Governmental Industrial Hygienists ("ACGIH") recommended exposure limits for over 100 contaminants, including asbestos

dust. Ex. 1376, at 54-56; Ex. 1386, at 178-182; Ex. 1388, at 65-140-65-144; Ex. 1396, at 5-14. The ACGIH explained that the Threshold Limit Values "represent conditions under which it is believe that nearly all workers may be repeatedly exposed, day after day, without adverse effect." Ex. 1386, at 178. For asbestos dust, the Threshold Limit Value was set at an 8-hour time-weighted average exposure of 5 million particles of asbestos per cubic foot of air ("5 mppcf"). Ex. 1376, at 55; Ex. 1386, at 181; Ex. 1388, at 65-143.

75. Dohrman Byers, who served on the ACGIH's Threshold Limit Value Committee in the 1950s and worked as an industrial hygienist for the United States Public Service and the States of Montana, Massachusetts, and New Jersey, testified that the Threshold Limit Value was considered to be a "safe" level of exposure:

Q. Can you tell us what the Threshold Limit committee did?

A. In detail, or --?

Q. In general.

A. Well, the Threshold Limits Committee met periodically to examine data on the toxicity and epidemiology and other aspects of the effects of occupational health hazards, chemical and otherwise. And on the basis of these, to establish a recommended guideline of permissible level of exposure which they called the threshold limit values. These were predicated on the idea that this level of exposure would be safe for eight hours per day daily for the normal working individual.

Now, a safety factor was incorporated into these.

....

Q. Now, these threshold limits, were they also called threshold limit values?

A. That's the term now. Originally they were called maximum allowable concentrations.

....

Q. You said there was a safety factor built into these maximum allowable concentrations. Could you please explain what that is?

A. All right. The -- well, the human, or any animal, do not all react the same; there is a range of actions, and it was desired to set a level



which would protect practically everybody, recognizing that there are some hypersusceptible individuals and there are occasionally individuals who have, let's say, reduced health capacity. With the data at hand we would try to arrive at a level which would appear to protect most individuals, by that I mean a very high percentage. And then, depending on the nature of the chemical, we would reduce the level for added safety to compensate for any errors in judgment, to some extent, to compensate for some people being more susceptible than we expected, or in other words, just a safety factor. And we would attempt to use at least a two-fold factor; in other words, if we thought twenty was a good, probably safe limit, we would recommend ten.

....

- Q. During the time that you were on the Threshold Limits Committee, did anybody ever raise a question as to the safety of the maximum allowable concentration for asbestos?
- A. To the best of my knowledge, no.
- Q. I take it from approximately 1942 until, well, even perhaps presently, you have been attending annual meetings of the ACGIH?
- A. Yes, I have attended most of them up until 1981, anyway.
- Q. At any point in time was there on the agenda at the annual meeting a discussion of changing the maximum allowable concentration for asbestos, at the annual meeting?
- A. Yes, that did come up, but I believe that it was in the late 1960s.
- Q. Can you tell us when, approximately, that was?
- A. Because of the final evidence of carcinogenic potential of asbestos, they made a change and as I have to say, I believe the change came in the late 1960s -- 1968, '69.

Dohrman H. Byers Dep. 13:4-21:12, dkt. 193.

76. Mr. Byers further testified that the Threshold Limit Value was measured by the asbestos dust (not the total dust) that was in the air:

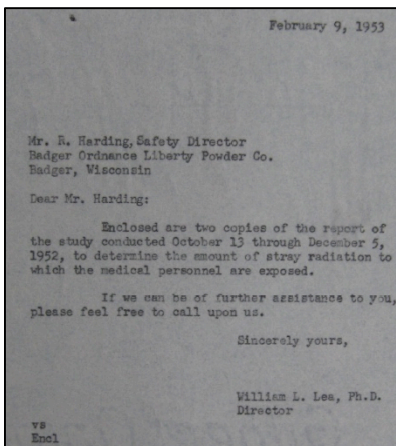
- Q. Now, when you were on the Threshold Limits Committee, was there a maximum allowable concentration recognized for asbestos?
- A. To the best of my knowledge, yes, there was.
- Q. What level was that?
- A. I believe it was five million particles per cubic foot?

- Q. Now, did that standard apply to just the asbestos that was in the air, or did that standard apply to all of the dust in the air, some unknown portion of which might be asbestos?
- A. The standard was set on the presumption of 100 percent asbestos.
- Q. So it was a pure asbestos standard?
- A. Yes.

*Id.* at 17:2-9.

77. In 1947, the Wisconsin Industrial Commission adopted the 5 mppcf Threshold Limit Value for asbestos and defined levels above 5 mppcf as “harmful exposure” under the Wisconsin General Orders on Dusts, Fumes, Vapors and Gases. Ex. 1412, at 12 & Rev. 4; Trial Tr. 2-A-114:9-23; 2-P-104:2-21. As the Wisconsin Industrial Commission explained, the Threshold Limit Value was “designed to prevent the inhalation by workmen of harmful dusts, fumes, vapors and gases to an extent which may cause incapacitation, disability or in *any way seriously injures any part of the body.*” Ex. 1412, at 7 (emphasis added).

78. William Lea, PhD, worked in the Health Occupational Health Division for the Wisconsin State Board from 1940 until his retirement in 1974 and visited Badger Ordnance Works repeatedly in the 1950s:



Ex. 1917-53 (showing various visits); Trial Tr. 2-A-114:9-23.

79. As a member of the ACGIH, Dr. Lea testified that the Threshold Limit Value for asbestos was considered to be a "safe" level of exposure:

Q. And what did these dust counts of below the maximum allowable concentration indicate to you about the safety of the workers at the Algoma plant?

A. Well, we viewed it as indicating conditions were safe, for prolonged exposure, since they were well below the accepted.

Q. And you mentioned the concept of prolonged exposure. Does the time weighted average come into play, in any dust study, including the Algoma dust study?

A. Oh, sure.

....

Q. And that would factor into your conclusion that the level of dust there was safe, in the plant?

A. Yes.

....

Q. During the entire duration of your work at the State Board of Health, and your membership in the ACGIH, were you aware of anyone challenging the safety of the maximum allowable concentration for asbestos?

A. No.

Q. During that same period of time, are you aware of any written literature in the field, which challenged the safety of the maximum allowable concentration for asbestos?

A. No.

Lea Dep. 39:21-40:5, 40:11-40:13, 48:18-49:3, dkt. 191.

80. Dr. Lea further testified that the Threshold Limit Value was measured by the asbestos dust (not the total dust) that was in the air:

Q. Let's focus on the asbestos maximum allowable concentration. Was that a standard to be applied to all the dust in the air that contains some portion of asbestos, or just the asbestos dust that was in the air?

A. Just the asbestos.

Q. So it was a pure asbestos standard?

A. Right.

*Id.* at 34:22–35:4.

81. Like Dr. Lea and Mr. Byers, Mr. Hazard testified that the Threshold Limit testified that the Threshold Limit Value was considered to be a “safe” level of exposure:

Q. During the time that Owens-Illinois manufactured and sold Kaylo, did the Threshold Limit Value for asbestos remain 5 million asbestos particles per cubic foot?

A. Yes.

....

Q. Did the concept of the TLV have within it a safety margin?

A. Yes, there was a safety margin. A person could be exposed to the TLV for his working life and he would be safe.

Hazard Dep. 116, 13.

82. Like Dr. Lea and Mr. Byers, Mr. Hazard also testified that the Threshold Limit Value for asbestos applied to the asbestos component of a mixed dust like Kaylo:

Q. [W]as the 5 million standard applicable to total dust, some of which might be asbestos particles, or was it applicable to ... asbestos particles?

A. It was applicable to the asbestos particles.

Hazard Dep. 113:19–22. Later, Hazard explained, “[Y]ou are not interested in total dust. You want to know how much asbestos your guy is breathing in.” *Id.* at 118:8–9.

83. From 1946 until 1968, ten years *after* Owens-Illinois stopping making Kaylo, the ACGIH’s Threshold Limit Value remained at 5 mppcf for asbestos. Ex. 1376, at 55; Ex. 1386, at 181; Ex. 1388, at 65–143; Ex. 1396, at 14.

84. Dr. Gregory, a certified industrial hygienist with uncontested credentials, provided the following opinion about the Threshold Limit Value:

Q. The third thing we asked you to do was evaluate the concept of the threshold limit value and its importance in this case, right?

A. That's correct.

Q. What was your conclusion, Dr. Gregory?

A. Well, the threshold limit value during the time period when Mr. Suoja worked at the Badger Ordinance was 5 million particles per cubic foot. In fact it had been 5 million particles per cubic foot since about 1938 and it remained that way until approximately 1970. And that was considered during that time period to be a safe exposure level that as long as exposure levels were below the 5 million particles per cubic foot, then employees exposed below those levels would not suffer any adverse health effects or occupational diseases while working with asbestos-containing products.

Trial Tr. 2-P-82:20-83:10.

**2. Insulators like Mr. Suoja were exposed to asbestos at levels below the Threshold Limit Value in place during the 1940s and 1950s.**

85. "A Health Survey of Pipe Covering Operations in Constructing Naval Vessels" by Philip Drinker, the Chief Health Consultant for the United States Maritime Commission, and colleagues was published on January 1946 in *The Journal of Industrial Hygiene and Toxicology* (the "Fleisher-Drinker report"). Ex. 228, at 9.

86. The Fleisher-Drinker report made three conclusions: 1) the asbestos exposures of insulators were generally below the Threshold Limit Value on a time weighted average; 2) only three cases of asbestosis and absolutely no cancer was found among the 1,074 insulators studied (some of whom had prior asbestos exposure before working at the shipyards); and 3) insulation work was "relatively safe" and "not a dangerous" occupation. Ex. 228, at 15-16; Trial Tr. 2-A-120:3-122:22, 2-P-3:9-13.

87. Two decades later, in 1965, Dr. Irving Selikoff and his colleagues published a study that explained, "The only large scale survey of asbestos insulation workers was

undertaken in the U. S. by Fleischer *et al.* in 1945. They found only three cases of asbestosis and concluded that ‘asbestos pipe covering of naval vessels is a relatively safe operation.’” Ex. 1502, at 140; Trial Tr. 1-P-21:2-16.

88. In 1968, the *Journal of the American Medical Association* published “Asbestos Exposure, Smoking, and Neoplasia” by Dr. Selikoff and colleagues, who again cited the Fleisher-Drinker report and explained that the results of dust-exposure surveys in the insulator trade “have generally been within the 5 million particles per cubic foot permissible limits currently accepted by the American Conference of Governmental Industrial Hygienists.” Ex. 1524, at 110; Trial Tr. 1-P-21:2-23:15.

89. Later in 1968, the *American Industrial Hygiene Association Journal* published “The Work Environment of Insulating Workers” by J. LeRoy Balzer and Dr. Clark Cooper in May-June 1968. Ex. 208, at 222; Trial Tr. 2-P-11:22-12:12. The authors studied the work environment and exposure levels experienced by union insulators:

Although we attempted to sample the dustiest operations, the time-weighted averages for dust samples containing asbestos would probably not exceed the TLV in most situations, even on ships. This conforms to findings by Fleischer *et al.*

Ex. 208, at 227.

90. Based on the Fleisher-Drinker report, Owens-Illinois’s industrial hygienist at the time, Bill Hazard, concluded that people handling Owens-Illinois Kaylo were in a safe environment:

Philip Drinker “published in the *Journal of the American Industrial Hygiene Association* [a study] where they examined shipyard insulation workers, men who installed pipe insulation on shipboard. They concluded that the occupation of insulation insulators was a safe one.”

Hazard Dep. 104:15-23.

91. Like Mr. Hazard, William Fluck, who worked in the Industrial Hygiene Unit at the Wisconsin State Board of Health during the relevant period, testified that the Fleisher-Drinker report was authoritative and he had reviewed the report in the course of his duties:

Q. Is that an article which you reviewed in the course of your duties at the industrial hygiene unit?

A. I did.

Q. Did you consider it authoritative?

A. It added to our knowledge of asbestos .... I would consider it authoritative, because this gentleman, Phillip Drinker, was a very highly respected industrial hygienist.

Fluck Dep. 35:2-12, dkt. 192.

92. Dr. Peter Neushul, an historian who specializes in the history of United States 20th Century technology and science, provided the following opinions about the Fleisher-Drinker report:

Q. What did Philip Drinker and his colleagues conclude about whether or not asbestos pipe covering was a dangerous occupation?

A. They concluded that based on this study of over a thousand insulators, that it was - it could be a safe occupation.

....

Q. Professor Drinker's study in 1946, was that the first large-scale epidemiological study of the users of finished insulation products that was published anywhere in the world?

A. Yes, it was.

....

Q. Between 1946 and the mid-1960s, was there any publication in the peer-reviewed literature in the world that said that the conclusions in Fleischer-Drinker were wrong?

A. No.

Trial Tr. 2-A-122:8-13, 2-P-3:9-13, 2-P-3:21-25.

93. Dr. Gregory, a certified industrial hygienist with uncontested credentials, provided the following opinion about the Fleisher-Drinker report:

Q. And you're familiar with the Fleischer-Drinker report, aren't you?

A. Yes, I am.

Q. And you've assessed that from an industrial hygienist perspective?

A. That is correct.

....

Q. And at that time when Fleischer and Drinker did those studies and published their findings, what were their conclusions?

A. Their conclusion was that pipe covering was not a dangerous occupation based on the fact that they only found three cases of asbestosis in all of the employees that they had x-rayed and based on the monitoring that they had performed, which basically the results were within the 5 million particles per cubic foot TLV of that time period.

Q. If they used control methods and kept exposure limits within the threshold limit values then you wouldn't see adverse health consequences?

A. That's correct.

Trial Tr. 2-P-109:14-110:21.

94. The plaintiff's purported industrial hygiene expert, Stephen Kenoyer,<sup>7</sup> acknowledged the same facts contained in the Fleisher-Drinker report:

Q. Can you identify for the Court a single article published anywhere in the peer-reviewed literature, anywhere in the world, in and language, that said ... that users of finished insulation products were being exposed above the threshold limit value?

A. In what time period?

Q. Before 1965.

---

<sup>7</sup> Assuming the Court strikes Mr. Kenoyer's testimony, Owens-Illinois incorporated the exhibit's statements that were called to his attention on cross-examination. Trial Tr. 2-A-116:3-13.



A. I'm not aware of one before 1965.

....

Q. What Dr. Drinker and his colleagues concluded after looking at the work of these insulators was that it may be concluded that such pipecovering is not a dangerous occupation, correct?

A. That's what he says there, yes.

Q. They also state, on page 15, just before that, that it appears that asbestos pipecovering of naval vessels is a relatively safe occupation, correct?

A. That's what he says there.

...

Q. Can you identify for the Court a single study published in the peer-reviewed literature, anywhere in the world, before 1965, that said the conclusions of Fleischer-Drinker were wrong?

A. No, I don't believe so, not before 1965.

Trial Tr. 1-P-23:20-24:9, 1-P-15:23-16:6, 1-P-23:16-23:20.

**3. Wisconsin and federal law required the asbestos Threshold Limit Value to be enforced at Badger Ordnance Works in the 1940s, 1950s, and 1960s.**

95. In 1947, the Wisconsin Industrial Commission enacted the Wisconsin General Orders on Dusts, Fumes, Vapors and Gases, which applied to all employers in Wisconsin for the protection of employees at "all places of employment and public buildings." Ex. 1412, at 10. To ensure compliance with the allowable dust levels, including the Threshold Limit Value of 5 mppcf for asbestos, employers were obligated to provide general and exhaust ventilation (Sections 4 and 5) personal protection (Section 6), exhaust equipment (Order 2020), respirators and similar protective devices (Order 2021), and wetting or dampening procedures to reduce dust (Order 2022). *Id.* at 13-21.

96. A booklet published by the Department of Labor in 1951 stated the Walsh-Healey Act "safety and health standards . . . will be applied in determining whether, in

specific cases, Government contracts are being performed under safe and sanitary conditions.” Ex. 1573, at Forward. The booklet made clear:

(a) Workers shall not be exposed to concentrations of atmospheric contaminants hazardous to health. The most recent values for maximum concentrations as recommended by the American Conference of Governmental Industrial Hygienists shall be used as a guide in appraising occupational health hazards, and in evaluating controls....

(b) Control of atmospheric contaminants may be accomplished by any of the following methods:

(i) Substitution of a less toxic material for the material contaminating the workroom atmosphere.

(ii) Exhaust ventilation so that the contaminant is removed from the workroom atmosphere.

(iii) Isolation of the operation, so that the contaminant does not enter the general workroom atmosphere in hazardous concentrations, provided that any worker who is exposed to a health hazard by entering the isolated area shall be furnished personal protection in accordance with the provisions of this code.

(iv) Enclosure of the operation, so that the contaminant does not escape into the workroom atmosphere in hazardous concentrations.

(v) Change the process or operating method (such as by wet methods, the use of foams, colloids, etc.), so that the hazard is controlled.

(vi) Increase of general ventilation, so that the contaminant is diluted to a safe concentration.

*Id.* at 23. The 1951 booklet also stated that “the values recommended by the American Conference of Governmental Industrial Hygienists should be used as a guide in appraising occupational health hazards and in evaluating control” (5 mppcf for asbestos) and that “Personal protective equipment and/or protective barriers shall be provided whenever substances ... are encountered in a manner capable of causing injury.” *Id.* at

23-24.

97. The Wisconsin General Orders on Dusts, Fumes, Vapors and Gases and the Walsh-Healey Act applied to the insulation work at Badger Ordnance Works. Trial Tr. 2-A-113:21-115:3, 2-P-107:25-109:25, 2-P-112:8-15.

**4. Owens-Illinois understood Kaylo to be a safe product for its intended use during the 1940s and 1950s.**

---

98. The plaintiff introduced the deposition testimony of Bill Hazard, Owens-Illinois's former industrial hygienist, who testified about Owens-Illinois's knowledge in the 1940s and 1950s. Willis Hazard Dep., dkt. 150; Pl.'s Design. 7-9, dkt. 172.

99. Mr. Hazard graduated from Harvard College in 1929, earned a Master's degree in physics from Harvard in 1930, became an instructor at the Harvard School of Public Health from 1930 until 1934, and worked at Owens-Illinois from 1934 until 1942. *Id.* at 15-16. Between 1942 and 1946, Mr. Hazard served as a Captain and Major in the Department of Industrial Hygiene of the United States Public Health Service during World War II. After the war, Mr. Hazard return to Owens-Illinois where he worked until 1974. *Id.* at 15-17, 117-18.

100. Mr. Hazard testified why Owens-Illinois considered Kaylo to be a safe product, which did not require a warning, based on the Fleisher-Drinker Report, the Threshold Limit Value, and the Saranac Laboratory study of Kaylo:

Q. Why didn't Owens-Illinois put a warning on?

A. The product was safe and the dust from the product was safe.

Q. And on what do you base that opinion?

A. Early in the days when Kaylo was being made, we worked with Saranac Laboratory for them to conduct animal inhalation

experiments at Saranac Lake. Dust was gathered from a dust arrester at the Berlin Plant and was sent to Saranac where they dispersed it in a room which was lined with animal cages and wharf the animals breathed this dust. This dust being Kaylo dust.

They followed the animals for a matter of weeks and weeks. The daily exposure was eight hours a day, five and a half days a week, week after week. Then at intervals when they assumed from their experience that the animals might have been affected by breathing the dust, they sacrificed groups of animals.

The first two experiments, first two series of experiments, were negative. The dust had no affect on the animals. The third series of experiments showed that the animals had contracted pulmonary asbestosis which was quite surprising, really, and at first somewhat of a concern. However, it was concluded after succeeding experiments that there was no danger to the user of regular commercial Kaylo. The reason for this, the reasons were two.

First, the exposure to the dust that the animals had was very, very high in actual figures in the order of 105, 110, 115 million particles, million asbestos fibers per cubic foot of air. The threshold limit value for man is only 5 million fibers per cubic foot of air. So the cloud was extraordinarily dense and the reason for this was to speed up the effect on the animals. As it is, each series ran for two or three years, but they gave them big doses in order to speed up the affect.

Now, the second aspect was that the animals breathe dust five and a half days a week, eight hours a day, week after week during their lifetime. This is a very accelerated experiment. No man ever breathes Kaylo dust for his lifetime. It would be impossible.

So because of these two factors: One, the immense concentration that the animals were exposed to; and second, the fact that they here exposed for their lifetime made it unnecessary to label the product with some cautionary label.

In addition to this, it was published in the '40's a paper by Drinker ... published in the Journal of the American Industrial Hygiene Association where they examined shipyard insulation workers, men who installed pipe insulation on shipboard. They concluded that the occupation of insulation insulators was a safe one....

There were other things that were important in making this decision. The Kaylo plants at Berlin and Sayreville, New Jersey, had no workmen's compensation claims for any disease caused by breathing dust even after a good many years. They had no increased sick absenteeism in any way related to asbestos or Kaylo dust. The

industrial hygiene people and doctors from the State of New Jersey Health Department found the insurance carrier, Workmen's Compensation insurance carrier from the Health Foundation, from Saranac Laboratory itself, and tests that we made at Owens-Illinois, showed that the dust exposure at Sayreville and Berlin was within safe limits, particularly as regards asbestos dust.

So the conclusion was that this product was not harmful; hence, no reason to put a warning label on the carton.

*Id.* at 100-104.

**5. Insulators like Mr. Suoja were not at a known risk of developing cancer in the 1940s and 1950s.**

101. Before 1965, as the plaintiff's purported industrial hygiene expert admitted,<sup>8</sup> there were no articles published anywhere in the peer-reviewed literature, in any language, anywhere in the world, that users of finished insulation products were at risk of developing cancer:

Q. Can you identify for the Court a single article published anywhere in the peer-reviewed literature, in any language, anywhere in the world, before 1965 that said that users of finished insulation products were at risk of getting cancer?

A. Not that I'm aware of.

Trial Tr. 1-P-24:4-9.

102. In the 1940s and 1950s, no manufacturer of asbestos insulation products ever placed a warning on its finished products, and the first warnings on finished products began appearing only in the mid-1960s:

Q. Did any manufacturer put a warning on its thermal insulation product in the 1940s and 1950s?

A. Not that I'm aware of.

---

<sup>8</sup> Assuming the Court strikes Mr. Kenoyer's testimony, Owens-Illinois incorporated the exhibit's statements that were called to his attention on cross-examination. Trial Tr. 2-A-116:3-13.

Q. When did warnings come on to thermal insulation products?

A. In the mid 1960s is what I've found during my research.

Trial Tr. 2-P-114:21-115:2.

103. In August 1949, *The Journal of the American Medical Association* contained an editorial, "Asbestosis and Cancer of the Lung." Ex. 1465, at 1219; Trial Tr. 2-P-4:1-7. The article concluded that, "[a]s the available evidence shows that the occurrence of cancer of the lung is related to pulmonary asbestosis and is *not merely a possible sequela of exposure to asbestos dust.*" Ex. 1465, at 1220 (emphasis added).

104. In 1955, the *British Journal of Industrial Medicine* published an article by Dr. Richard Doll reviewing the worldwide reported cases of lung cancer in persons with asbestosis and his study of asbestos textile manufacturing plant workers from a plant in the United Kingdom. Ex. 1476; Trial Tr. 2-P-5:20-6:20. Dr. Doll concluded that asbestos textile manufacturing plant workers *with asbestosis* are at a higher risk of getting lung cancer than the general population. Ex. 1476, at 86.

105. In December 1955, Dr. W.C. Hueper, the Chief of the Environmental Cancer Section of the National Cancer Institute, in the *American Journal of Clinical Pathology* published an editorial that was entitled, "Silicosis, Asbestosis, and Cancer of the Lung." Ex. 1478, at 1388; Trial Tr. 2-P-5:7-19. The article explained that, "Epidemiological data available at present indicate that an increased liability to cancer of the lung is limited to *the presence of asbestosis* of the lung and does not extend to asbestos without the existence of a pneumoconiosis resulting therefrom." Ex. 1478, at 1389.

106. In 1960, years after Owens-Illinois ceased the sale of Kaylo, the *British Journal of Industrial Medicine* published a paper by Dr. J. C. Wagner of 33 cases of mesothelioma found among people living or working in the area of a South African crocidolite asbestos mine. Ex. 1486, at 260; Trial Tr. 2-P-7:9-8:4. The paper, "Diffuse Pleural Mesothelioma and Asbestos Exposure in the North Western Cape Province," was the first to suggest an association between mesothelioma and exposure to asbestos. Ex. 1486, at 260; Trial Tr. 2-P-7:17-23.

107. In April 1964, *The Journal of the American Medical Association* published a paper by Dr. Irving Selikoff and colleagues that was titled, "Asbestos Exposure and Neoplasia." Dr. Selikoff reported on the increased incidence of cancer in members of the International Association of Heat and Frost Insulators and Asbestos Workers. Ex. 1493, at 22.

108. In 1964 Dr. Irving Selikoff convened a conference in New York City to discuss his research and the biological effects of asbestos. The conference remarks were published in the *Annals of the New York Academy of Sciences*. The publication included the comments of Dr. E.C. Hammond, from the American Cancer Society and collaborator with Dr. Irving Selikoff:

I believe that there was hardly anybody a few years ago who would have suspected that there was a lung cancer risk in this group of insulation workers. These men were not asbestos weavers nor asbestos miners, and nobody at that time had suggested an increased risk at all for insulation workers.

Ex. 1497, at 600.

**6. Asbestos was a characteristic ingredient of all high temperature asbestos insulation in the 1940s and 1950s.**

109. The plaintiff offered no credible evidence that Owens-Illinois Kaylo—or any other high temperature asbestos insulation in the 1940s and 1950s—was or could have been made with non-asbestos substitutes. Asbestos was a characteristic ingredient of all high temperature asbestos insulation in the 1940s and 1950s. Trial Tr. 1-P-6:9–20; Ex. 1258, at 5144–5162.

110. The credible evidence showed that, in the 1940s and 1950s, there were no available alternatives for asbestos in high-temperature thermal insulation products above 750° Fahrenheit. As the plaintiff's purported industrial hygiene expert, Mr. Kenoyer, admitted:<sup>9</sup>

Q. This is the Tebb[e]ns (ph), Leroy Balzer, Clark Cooper, Tabershaw article, correct?

A. That's what it says, yes.

Q. That's the one you cited from 1970, right?

A. Yes. We do mention that one, yes.

Q. Can you go to the top of page 2, please? In this article the authors note: "However, at present there are no thermally suitable alternatives to asbestos-containing materials for the prevention of heat loss from high temperature (750 F. and higher) pipes and boilers," correct?

A. That's what it says.

Trial Tr. 1-P-6:9–20.

---

<sup>9</sup> Assuming the Court strikes Mr. Kenoyer's testimony, Owens-Illinois incorporated the exhibit's statements that were called to his attention on cross-examination. Trial Tr. 2-A-116:3–13.



111. Owens-Illinois made several efforts to substitute other materials for the asbestos due to cost – including glass fiber, fiberglass – but the efforts were unsuccessful. Ex. 29, at 9, No. 10(b); Willis Hazard Dep. 35–36, dkt. 172.

**7. Owens-Illinois tested the Kaylo product with Saranac Laboratory in the 1940s and 1950s.**

---

112. As Mr. Hazard explained, Owens-Illinois hired Saranac Laboratory to conduct animal studies before the commercial manufacture and sale of the Kaylo product. Willis Hazard Dep. 36–37, 147–152; Trial Tr. 2-P-15:12–19.

113. Saranac Laboratory was the leading laboratory for the study of dust-related disease during the early to mid-20th century. Trial Tr. 2-P-13:6–11.

114. At the outset, on February 12, 1943, Owens-Illinois asked Saranac Laboratory to research the Kaylo product for “any air hazard” to “employees working in the plant” or “applicators or erectors at the point of use.” Ex. 1055, at 1.

115. On March 12, 1943, Saranac Laboratory wrote that the fact that the product has a mixture of quartz and asbestos “would certainly suggest that you have all the ingredients for a first-class hazard,” but “the asbestos may or may not be in such form as to be inhalable.” Ex. 1058, at 1.

116. On October 30 and 31, 1947, Saranac Laboratory provided an interim report that the manufacturing process of the Kaylo product appeared to render the asbestos and silica in Kaylo dust inert and “biologically inactive.” Ex. 1074, at 1; Ex. 1073, at 10. Saranac Laboratory suggested that further studies should be performed to see if the Kaylo dust has an influence on tuberculosis. Ex. 1074, at 1; Ex. 1073, at 11.

117. On October 30, 1948, Saranac Laboratory provided another interim report to Owens-Illinois. Ex. 1086, at 1. The animals, rats, hamsters, and guinea pigs were exposed to Kaylo dust for eight hours a day, five and one-half days a week at atmospheric concentrations averaging 116 million particles per cubic foot of air. *Id.* at 3. While the rats and hamsters still showed no signs of fibrosis, nine guinea pigs that were exposed to those levels for three years straight (essentially the lifetime of the animal) did show evidence of fibrosis characteristic of asbestosis, but not silicosis. *Id.* at 3-5. The initial conclusion that the manufacturing process rendered the raw materials of silica, asbestos, and diatomaceous earth biologically inert, was amended to say the asbestos had not changed as result of the manufacturing process. *Id.* at 4. The asbestos in Kaylo was capable of causing asbestosis in the guinea pigs, but not rats, under the excessive exposure conditions of the animal tests. *Id.* *The study did not find any cancer or neoplastic changes in any of the animals.* *Id.* at 4-6.

118. On November 16, 1948, Saranac Laboratory advised Owens-Illinois that the tentative conclusion that Kaylo dust was biologically inert had to be altered, as the asbestos remained asbestos, and must be regarded as “potentially hazardous.” Ex. 1087, at 1. Owens-Illinois was told that it should institute control measures at its Kaylo manufacturing plant to prevent overexposure to manufacturing plant employees. Saranac Laboratory also suggested continuing the experiments regarding tuberculosis. *Id.* at 2, 4.

119. In 1949, Owens-Illinois contracted with Saranac Laboratory to conduct annual reviews of x-rays of Kaylo manufacturing plant personnel to monitor health of employees. Ex. 1092, at 1.

120. On December 12, 1950, Owens-Illinois followed up on a prior request for publication of the results of the Saranac Laboratory study. Owens-Illinois also asked if Saranac Laboratory could visit the Kaylo manufacturing plant to take air samples. Ex. 1100, at 1.

121. On December 18, 1950, Saranac Laboratory advised Owens-Illinois the publication should wait until the final report was complete and until the Saranac Laboratory personnel could conduct a study of the Kaylo manufacturing plant in January 1951. Ex. 1101, at 1.

122. On January 30, 1951, representatives from the Saranac Laboratory visited the Kaylo manufacturing plant in New Jersey to evaluate the process and related dust control measures, and make recommendations. Ex. 1103, at 1. The purpose of the survey “was to observe the plant operations and to discover whether any hazards to health might be created by dust liberated from the raw materials handled or from the finished products manufactured.” *Id.*

123. In a May 29, 1951 report, Saranac Laboratory found that “considerable attention had been given in this plant to the control of dust” and that it was important that the control measures in place be maintained. Ex. 1103, at 1. Saranac Laboratory also noted that the State of New Jersey, in 1943, and the ACGIH had recently adopted the Threshold Limit Value for silica and asbestos and, while the dust counts were “relatively

low,” certain areas of the plant had dust counts that “might be hazardous, or at least one which approached the maximum allowable limit established by code.” *Id.* at 5–6. Saranac Laboratory recommended that Owens-Illinois continue to pay attention to housekeeping, dust suppression, exhaust ventilation, and dust counting, as well as conforming to regulations about exposure levels and monitoring worker health including pre-employment examinations and annual chest x-rays. *Id.* at 7–8.

124. On November 6, 1951, Mr. Hazard confirmed with Dr. Miriam Sachs of the State of New Jersey Department of Health that air sampling performed by the department at the Kaylo manufacturing plant was “in line with the industrial health standards of the state.” Ex. 1107, at 1.

125. On February 7, 1952, Saranac Laboratory issued its final report on the Kaylo studies to Owens-Illinois. Ex. 1108, at 1. The final report summarized the previous interim reports and described the overexposure of the animals. *Id.* at 3–4. The animals were exposed eight hours a day, five days a week, plus four hours on Saturday. *Id.* at 5. The concentration of Kaylo dust to which the uninfected animals were exposed was generally within the range of 100 to 125 million particles per cubic foot (mppcf) and the overall average was 115 mppcf. *Id.* at 6. The infected animals were exposed at an average of 205 mppcf. *Id.* The report concluded that Kaylo dust “is capable of producing in the lungs of guinea pigs, but not of rats, the peribronchiolar fibrosis typical of asbestosis.” *Id.* at 18. It further noted that Kaylo dust “will not cause in guinea pigs, rats, or hamsters either silicosis or the diffuse fibrosis which is sometimes follows the inhalation of diatomaceous

earth.” *Id.* The report did not find any cancer or neoplastic changes in any of the animals. *Id.* at 1–18.

126. Saranac Laboratory never told Owens-Illinois that it should stop making the Kaylo product. Trial Tr. 2-P-17:25–18:2. Nor did Saranac Laboratory ever recommend Owens-Illinois to place a warning on the Kaylo product. Trial Tr. 2-P-18:6–8; Hazard Dep. 125–26, dkt. 150. Additionally, Saranac Laboratory did not find any Kaylo plant worker who developed asbestos-related disease when Owens-Illinois made Kaylo. Trial Tr. 2-P-17:8–11.

127. In September 1955, the Saranac Laboratory study was published in the *American Medical Association’s Archives of Industrial Health*. Ex. 1116; Trial Tr. 2-P-15:20–24. The publication described the exposure levels, the effect on the animal tissue from the asbestos, silica, and calcium silicate. Ex. 1116, at 343. The publication noted the experiments “were designed to reveal the nature of the pulmonary tissue reaction to inhaled dust of the material in normal animals and those harboring an experimentally induced tuberculous infection.” *Id.* According to the authors, the study was important despite experience with other “siliceous materials” because “[r]ecognition must be given, however, to the possibility that any potentially hazardous raw material used to make a product might not be entirely converted to a nonhazardous form during the manufacturing process and, therefore, might appear to a greater or less extent in an unchanged condition in the final product.” *Id.* The article also noted that, despite the prolonged exposure to massive amounts of the dust, no cancer was found in any of the animals: “no neoplastic change could be postulated.” *Id.* at 347 (emphasis added).

128. Dr. Lea testified about the Saranac Laboratory study. As noted above, Dr. Lea was an unbiased industrial hygienist working for the Wisconsin State Board of Health during the relevant period, studied Kaylo dust levels at Algoma Hardwoods in Wisconsin, and concluded that the workers there were not at risk of asbestos disease. As Dr. Lea testified,

Q. If you had been told that the Kaylo product that was studied by you Unit at Algoma was the subject of animal experiments, where rats and hamsters and guinea pigs were exposed to massive amount of, amounts approaching 100 million particles per cubic foot of air, 24 hours a day, for the life time of the animals, and that those animals, when examined, showed evidence of fibrosis, similar to asbestosis, if you had been given that information at the time you were doing your work at the Algoma plant, would that have changed, in any way, the test that you did or the conclusions that you drew, with respect to the safety of the plant?

A. No.

....

Q. Why not?

A. Well, we're back, sort of, to the previous problem, with high exposure for short durations, being numerically equivalent to low exposure, for a long time. As I say, sometimes that doesn't work.

Q. And in the context of the Kaylo product, if animal experiments involved exposure levels, way above the maximum allowable concentration for the life time of the animals, would that, in any way, change your analysis of the maximum allowable concentration, or the conclusions that you drew about the safety of the Algoma plant?

A. No.

Lea Dep. 93:5-94:16, dkt. 191.

129. Similarly, Mr. Fluck testified about the Saranac Laboratory study. As noted above, Mr. Fluck was an unbiased industrial hygienist working for the Wisconsin State Board of Health during the relevant period, studied Kaylo dust levels at Algoma

Hardwoods in Wisconsin, and concluded that the workers there were not at risk of asbestos disease. As Mr. Fluck testified,

Q. If at the time that you were doing your work at the Algoma plant you had been told that rats, guinea pigs and hamsters were exposed over their lifetimes to exposures of Kaylo dust ranging up to 100 million particles per cubic foot of air, 24 hours a day, living in the environment; and that when the rats and hamsters and guinea pigs were sacrificed there was evidence of fibrosis in the animals akin to asbestosis in some of the animals, would that information have changed in any way you work at the Algoma plant?

A. Asbestosis in these experimental animals?

Q. Fibrosis consistent with asbestosis.

A. High concentrations way above the permissible range?

Q. Yes.

A. It wouldn't affect us very much because there are many articles come out, many so-called studies put out by individuals or institutions that - unless they're corroborated by others - are almost meaningless. So many of these things turn out to be wrong.

Secondly, finding fibrosis at concentrations many times higher than the M.A.C. is something you'd expect. We already knew there was fibrosis cause by asbestos .... High concentrations of fibrosis wouldn't surprise me; and secondly, if it was something even more serious than that in experimental animals, then you have to translate that to humans of course. We hardly paid any attention to one study because there are so darn many of these studies that come out that are never repeated. And even if they are, then you have to take that data and associate it with all the other known data and decide which is the most meaningful ....

....

Q. And would the information that I just described have caused you to change your conclusions and recommendations with regard to the Algoma plant in any way?

A. Not at all. Not at ... a hundred particles per cubic foot, and causing some fibrosis in experimental animals - that wouldn't have changed anything whatsoever.

Fluck Dep. 163:3-166:1, dkt. 192.

8. **Owens-Illinois Kaylo was considered to be a “non-toxic” product in the 1940s and 1950s.**

130. The plaintiff offered Owens-Illinois advertisements that described Kaylo to be a “non-toxic” material. *E.g.*, Ex. 40, at 1. There is no evidence that Mr. Suoja, his employers, Badger Ordnance Works, or anyone else read and relied upon the advertisements.

131. Dr. Gregory, a certified industrial hygienist with uncontested qualifications, explained that asbestos was not considered a toxic material in the relevant time period:

During that time period [1950s] it was considered nontoxic. The definition of toxicity changed in the 1960s. Toxicity was only materials that caused systemic poisoning or damage to the body, like lead, arsenic and things that you inhale or ingest and then they travel systemically throughout the body and cause their damage. Asbestos was not considered a toxic material until that definition changed in the 1960s.

In fact the ACGIH TLVs listed it as a mineral dust. They didn’t list it as a toxic dust. And all the textbooks during that time period listed it as a mineral dust, not a toxic dust, because of the definition that was used for toxicity versus nontoxicity in the field of toxicology .... I’m an industrial hygienist and I know the difference between toxicity and nontoxicity and I have read many of those old textbooks.

Trial Tr. 2-P-144:9-145:1.

132. The plaintiff’s purported industrial hygiene expert, Stephen Kenoyer,<sup>10</sup> acknowledged that the published literature in the 1950s described asbestos as “non-toxic”:

---

<sup>10</sup> Assuming the Court strikes Mr. Kenoyer’s testimony, Owens-Illinois also incorporated the exhibit’s statements that were called to his attention on cross-examination. Trial Tr. 2-A-116:3-13.



Q. It's *Industrial Medicine and Hygiene*, edited by E.R.A Merewether, 1956; do you see that?

A. Yes, sir.

Q. And the esteemed Dr. Merewether, the expert on asbestos at that time, on page 7 of his treatise, he identifies asbestos as non-toxic, correct?

A. That's what it says; yes, sir.

Trial Tr. 1-P-24:23-25:4; Ex. 1348, at 7.

....

Q. According to the ACGIH, asbestos does not belong in the Toxic Dust category as of 1958, right?

A. That's correct.

Trial Tr. 1-P-25:13-15; Ex. 1386, at 181.

**G. The Lack of Any Warning on Owens-Illinois Kaylo Was Not a Cause of Mr. Suoja's Asbestos Exposure and Disease.**

133. Even though Mr. Suoja was exposed to asbestos from approximately 1943 until December 1984 (*e.g.*, Ex. 1662, at 1; Ex. 1655, at 7; Ex. 1194, at 7), there is no evidence that Mr. Suoja's work practices changed despite repeated warnings about using precautions against potentially harmful exposures.

**1. Asbestos Worker Union Knowledge**

134. Mr. Suoja became a card-carrying member of the Asbestos Workers Union in January 1944 (Ex. 27, at 26-27), was very involved in his union (Trial Tr. 1-P-84:13), and went to union meetings (Trial Tr. 1-P-84:15-17).

135. The Asbestos Works Union published the *Asbestos Worker Journal* to all union members:

Q. How did the union communicate that information to members of the union like Mr. Suoja?

A. That was published in what was called an *Asbestos Workers Journal* magazine that went out quarterly.

Q. To all the union members?

A. To all the members, that is correct.

Q. Was this information that was available to Suoja?

A. Yes. He should have received those publications.

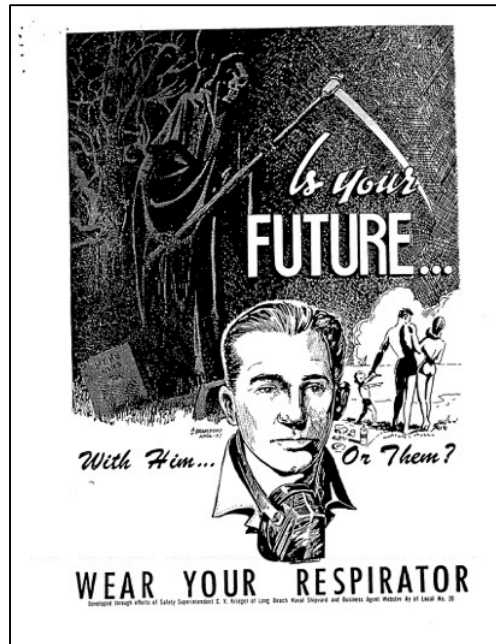
Trial Tr. 2-P-114:4-12; *accord* Trial Tr. 2-P-7:4-8.

136. Beginning in 1930, the *Asbestos Worker Journal* published information on preventing asbestos exposures above the Threshold Limit Value. The September 1930 issue of the *Asbestos Worker Journal* published an article titled "The 'Pulmonary Asbestosis' Menace." Ex. 1283, at 9; Trial Tr. 2-A-118:13-119:6. The article noted that:

A report on pulmonary asbestosis by Dr. E.R.A Merewether is reviewed . . . In this study only workers who were using more or less pure asbestos were included . . . the degree of concentration of the dust and the length of exposure [are] the most important factors [in the development of the disease asbestosis]. In cases in which there is continued exposure to high concentrations of the dust the fibrosis may be fully developed in from 7 to 9 years, while with milder degrees of exposure it may take from 15 to 25 years to develop fully.

Ex. 1283, at 10.

137. The November 1961 edition of the *Asbestos Worker Journal* published a full-page warning with a depiction of the Grim Reaper telling the union members to "WEAR YOUR RESPIRATOR":



Ex. 1295, at 29; Trial Tr. 2-P-8:5-19, 2-P-113:9-12.

138. The November 1962 edition of the *Asbestos Worker Journal* published a report on the 20th International Convention, Atlantic City, New Jersey September, 1962.

The report announced:

**Health Hazards.** The action of the last convention [1957] has been carried out ... your President ... met with Dr. Irving Selikoff .... It is my recommendation that this investigation be continued.... The asbestosis and silicosis problems were discussed by the delegates. All Locals gave a report of this serious problem.

Ex. 1297, at 22.

139. The May 1969 edition of the *Asbestos Worker Journal* included an "Insulation Hygiene Progress Report" from Dr. Selikoff reporting on respiratory use: "Only 4 percent of the workers said they always work a mask at a duty job and almost 30 percent said they never used such protection." Ex. 1313, at 3; Trial Tr. 2-P-113:18-114:3.

140. Harold Haase, a fellow Local 19 union member and coworker of Mr. Suoja at Badger Ordnance Works, testified that it was common knowledge in the early 1960s that working with asbestos could be hazardous:

Q. When you started in the early '60s, there were older guys that took you aside and said that the trade was hazardous?

A. Oh, yes.

....

Q. And that's because it was common knowledge within the folks at Local 19 that working with asbestos could be hazardous?

A. Yes, I would assume that.

Q. You would say that. Right?

A. Well, it was -- it's like anything else, you know. Car exhaust is bad for you to breath too, and you don't walk around with a mask outside.

Q. But you don't sit in garages running your car either; do you? Right?

A. True.

Harold Haase Dep. 43:11-44:11, dkt. 149.

141. No witness in this case offered credible evidence that Mr. Suoja ever saw a box of Owens-Illinois Kaylo or that, had he seen a warning label on Owens-Illinois Kaylo, he would have changed his work practices and, as a result, would not have developed his injury.

## **2. L&S Insulation's Mask Program**

142. Mr. Borchardt, the president of L&S Insulation for whom Mr. Suoja worked at Badger Ordnance Works, testified that masks were available since the 1950s:

Q. Did L & S, at any time, provide masks for their workers to use?

A. Yes.

Q. When did that first take place?

A. That occurred prior to my starting with the company.

Q. Prior to 1950?

- A. Yes, and it was just one of those items that was -- they were there and they were available for those that wanted to use them.
- Q. When you started out with the company, did anybody use them?
- A. When I started in pipe covering, I knew -- I recall people using masks occasionally.
- Q. Did a time come when L & S required that they be used?
- A. Yes.
- Q. When did that occur?
- A. With the advent of OSHA.
- Q. So, about the time OSHA went into effect, that's when L & S ordered the workers to use the masks?
- A. Yes.

Elmer Borchardt Dep. 42-43, dkt. 185.

143. Mr. Schlub, one of Mr. Suoja's coworkers in the late 1960s, testified that they did not use masks at Badger Ordnance Works:

- Q. When were you first using masks in the field, if ever, as an asbestos worker?
- A. Face masks?
- Q. Yeah.
- A. We never used them at Badger Ordnance, I know that.

George Schlub Dep. 42:6-12, dkt. 154.

### **3. Earl Gregory, PhD, CIH's Expert Testimony**

144. Dr. Gregory, a certified industrial hygienist with uncontested qualifications, offered uncontradicted expert testimony that a warning on a package of Owens-Illinois Kaylo would not have affected Mr. Suoja's asbestos exposure at all:

- Q. And we asked you to evaluate whether putting a warning on a package of Owens-Illinois Kaylo would have affected Mr. Suoja's asbestos exposure at all; is that right?
- A. That's correct.
- Q. And your conclusion was, if I heard it before, it would have no effect?

A. That's correct.

....

Q. What information would a warning have provided that the employers and jobsite owners didn't already know?

A. Well, right. I mean, they were aware of the Walsh-Healey Act. They were aware of the Industrial Commission of Wisconsin's requirements for the threshold limit value for asbestos. They were aware of engineering controls. They were aware of the hazards of overexposure to asbestos.

Q. What difference would that warning have made to Mr. Suoja's union?

A. It would not have made any difference because the Asbestos Workers Union, of all organizations, had more knowledge about the hazards of asbestos than any other organization in the country....

Trial Tr. 2-P-110:23-114:21.

**H. Plaintiff Has No Cognizable Damages Against Owens-Illinois.**

145. Even if the plaintiff's evidence had proven liability against Owens-Illinois, the evidence does not support a finding of damages against Owens-Illinois.

**1. Delores Suoja already recovered for the Estate.**

146. In 1997, Delores Suoja filed a lawsuit individually and on behalf of the Estate of Oswald Suoja in Wisconsin state court against other defendants for wrongful death and survival damages. Ex. 1618, at 1-2. Delores Suoja settled with the defendants and dismissed the lawsuit. Exs. 1645, 1671-1680.

147. In particular, Mrs. Suoja and Estate of Mr. Suoja settled and executed releases (so-called *Pierringer* releases) with National Gypsum Company, Raytech Corporation, Babcock & Wilcox, Building Service Industrial Sales Company, Inc., Eagle-Picher Industries, Fiberboard Corporation, Garlock Inc., General Electric, Owens Corning Fiberglas, Johns Manville, Union Asbestos & Rubber Co. (UNARCO/UNR), Celotex

Corporation, H K Porter, Rapid American Corporation, and Sprinkmann Sons Corporation. Exs. 1654-1680.

148. Kimberly Suoja, one of Mr. Suoja's daughters, testified that she knew her mother had filed the lawsuit and thought the claim related to her father's asbestos exposure was all said and done:

Q. And you understand your mother actually filed a lawsuit, don't you?

A. Yes, I believe that is true, yes.

Q. And so I guess my question here is, did Gary ever tell you that he was pursuing a lawsuit, this lawsuit, in federal court at any time?

A. I don't believe so.

....

Q. Did you know that this federal case was originally filed by your mother; did you know that, or not?

A. Well, I knew something was filed by mom, but I thought that ended.

....

Q. And you thought that the claim related to your father's asbestos exposure was all said and done a long time ago?

A. Yeah.

Trial Tr. 1-P-89:6-12, 1-P-98:15-18, 1-P-91:4-7.

**2. Kim Suoja admitted there are no remaining damages.**

149. On May 20, 2009, Kim Suoja filed for bankruptcy with an attorney and declared under oath that she had no contingent interests in the estate of Mr. Suoja and no contingent or unliquidated claims of any nature:

20. Contingent and noncontingent interests in estate of a decedent, death benefit plan, life insurance policy, or trust.	X
21. Other contingent and unliquidated claims of every nature, including tax refunds, counterclaims of the debtor, and rights to setoff claims. Give estimated value of each.	X

Trial Tr. 1-P-92:15-97:3, Ex. 1941, at 10.

150. On August 27, 2009, the United States Bankruptcy Court for the Western District of Wisconsin granted Ms. Suoja a discharge based on her sworn statements. Trial Tr. 1-P-97:4-11, Ex. 1942, at 1.

**3. Plaintiff admitted there are no remaining damages.**

151. On April 29, 2002, the plaintiff (a lawyer himself) filed a petition with the Circuit Court of Douglas County, asking that letters of special administration be issued to him with only these specific powers: the power to prosecute an action regarding injuries to the decedent on behalf of the Estate of Mr. Suoja. Ex. 1718, at 1.

152. On April 29, 2002, the Circuit Court of Douglas County issued letters of special administration to the plaintiff, and granted only these specific powers: the power to prosecute an action regarding injuries to the decedent on behalf of the Estate of Mr. Suoja. Ex. 1717, at 1.

153. On February 3, 2006, the Wisconsin probate court administering the estate asked the plaintiff about the status of this federal case. Ex. 1717, at 1.

154. On December 18, 2006, the plaintiff filed a petition for discharge as special administrator with the Circuit Court of Douglas County, stating under oath that he had completed the assigned duties and the items were received and disbursed. Ex. 1706, at 1.

155. On January 2, 2007, the Circuit Court of Douglas County entered an order discharging plaintiff as special administrator of the Estate of Mr. Suoja and finding he had properly performed authorized duties and filed any required accounts or reports. Ex. 1705, at 1.



156. The plaintiff testified that, in doing so, all of the valid claims for Estate of Mr. Suoja been made and all of the money had been collected and disbursed:

Q. You collected various recoveries for the estate during the course of that appointment as special administrator and distributed the funds; correct?

A. That's correct. Not quite all of them, but almost all of it.

Q. In December 2006, you petitioned the probate court to discharge you as the special administrator of the estate.

A. That's correct.

Q. At that time you gave an accounting of all the settlement proceeds and said that the money had been disbursed; correct?

A. That's correct.

Q. And you had requested the probate court to approve the accounting and to close the estate.

A. That's correct....

Q. And you told essentially the probate court that all of the assets of the estate had been collected and disbursed.

A. That's right. I signed what the attorneys had prepared for me.

....

Q. But at the time that you filed the petition for dissolution, you at that time believed that all of the valid claims had been made and the money collected and disbursed?

A. That was correct, because my information came from my attorneys.

Trial Tr. 2-A-54:13-57:2.

**I. Plaintiff's Claim Is Time-Barred.**

157. Mr. Suoja died on December 29, 1996. Ex. 22, at 1.

158. Before Mr. Suoja's death, Delores Suoja, his wife and beneficiary, knew of the fact of his injury and the potential claim:

Q This is a December 15, 1996 record. Do you see that, Mr. Suoja?

....

A Okay.

Q I've highlighted a portion here from these notes where it says "Most of kids are far distant but at least one lives here." That's referring to your brother Derald?

A That would be correct.

Q It continues "She has contacted his union and will need records re: mesothelioma for lawyers." Did I read that correctly?

A Yes.

Q Is it your understanding that your mom was contacting lawyers to file a lawsuit for your father's death before he passed away in December of 1996?

....

A. I wouldn't be surprised.

Trial Tr. 2-A-52:3-53:3; Ex. 1722A.

#### IV. LEGAL ARGUMENT

##### **A. Plaintiff Failed to Prove His Claims by the Greater Weight of the Credible Evidence.**

Wisconsin law requires the plaintiff to prove his claims by the greater weight of the credible evidence. Wis. J.I.-Civil 200 (Burden of Proof). The relevant question for this Court is not, as the plaintiff argues in his brief, whether there was *some* evidence presented at trial that supports his theory. The Court is not considering summary judgment, where it must view the evidence in the light most favorable to the nonmovant. As discussed below, the plaintiff failed to present credible, admissible proof sufficient to carry his burden on any of the key elements of his strict liability and negligence claims. *See id.*; Fed. R. Civ. P. 52; *Morisch v. United States*, 653 F.3d 522, 530 (7th Cir. 2011).

##### **1. The credible evidence does not show exposure to asbestos from Owens-Illinois Kaylo.**

At the outset, the plaintiff must prove with credible evidence that Mr. Suoja was actually exposed to asbestos dust specifically from Owens-Illinois Kaylo. Under

Wisconsin law, the Court cannot find exposure by speculation and conjecture; and “[w]hen the probabilities are at best evenly balanced, it becomes the duty of the court to direct a verdict for the defendant.” *Miller v. Am. Art Clay Co. Inc.*, 28 F. Supp. 3d 825, 831 (W.D. Wis. 2014) (citing *Zielinski v. A.P. Green Indus., Inc.*, 2003 WI App 85, ¶ 16, 263 Wis. 2d 294, 661 N.W.2d 491 (Wis. Ct. App. 2013)); *Alexander v. Auer Steel & Heating Co.*, 2015 WI App 28, ¶ 26, 361 Wis. 2d 284, 862 N.W.2d 618 (Wis. Ct. App. 2015) (citing *Merco Distrib. Corp. v. Comm. Police Alarm Co.*, 84 Wis. 2d 455, 460, 267 N.W.2d 652, 655 (Wis. 1978)).

Here, the objective proof shows that Mr. Suoja did not work in late 1958 or 1959 with Owens-Illinois Kaylo at Badger Ordnance. The Social Security records establish that, during that period, he was living in Illinois and working for McDermaid Roofing & Insulating. Ex. 1609, at 5–6; Trial Tr. 1-P-84:3–5, 1-P-103:7–8. There is no evidence whatsoever that McDermaid worked at Badger Ordnance Works in 1958 or 1959, or at any other time. McDermaid worked in Illinois. Elmer Borchardt Dep. 75:3–9, dkt. 186.

Even if the Court were to disregard the objective Social Security records, the undisputed sale of the Owens-Illinois Kaylo Division on April 30, 1958 (Ex. 29, at 1, 7, 8; Ex. 139, at 24; Ex. 30, at 1)<sup>11</sup> proves that any conceivable “Kaylo” exposure in late 1958 or

---

<sup>11</sup> The Court should reject the plaintiff’s request (Pl.’s Post-Trial Br. 20) to infer that Kaylo manufactured by Owens-Illinois and in inventory at the time of sale (April 30, 1958) was actually sold to Badger Ordnance Works by Owens Corning Fiberglas in late 1958 or 1959. First, there is no proof to support the requested inference. The 1958 sales agreement between Owens-Illinois and Owens Corning Fiberglas included a long list of items “inventories of raw materials for the production of Products, Products in process of manufacture, finished products in warehouse, and the manufacturing supplies and

1959 was a product made by a different company. There is no legitimate evidentiary basis for a contrary inference. *Alexander*, 2015 WI App 28, at ¶ 26; *Miller*, 28 F. Supp. 3d at 831; *Harris v. Owens Corning Fiberglas Corp.*, 102 F.3d 1429, 1431 (7th Cir. 1996); *Shine v. Owens-Illinois, Inc.*, 979 F.2d 93, 97–98 (7th Cir. 1992).

In 1968, Mr. Suoja did work at Badger Ordnance Works for L&S Insulation, but that work involved insulation products that were *not* made by Owens-Illinois. This work took place a decade *after* Owens-Illinois stopped making Kaylo. The photographic evidence and construction records prove that Badger Ordnance Works was originally built with Johns Manville 85% magnesia asbestos insulation (Exs. 1869, at 1–3; Ex. 1793, at 5), so there is no legitimate evidentiary basis that any “rip-out” work involved an Owens-Illinois product. *Alexander*, 2015 WI App 28, at ¶ 26; *Miller*, 28 F. Supp. 3d at 831; *Harris*, 102 F.3d at 1429–31; *Shine*, 979 F.2d at 97–98.

Mr. Suoja never testified that he used Owens-Illinois Kaylo, at Badger Ordnance Works or anywhere else, and plaintiff did not offer any of Mr. Suoja’s prior testimony. Even though his co-worker George Schlub used the word “Kaylo,” when talking about

---

repair parts at the Kaylo plant at Berlin, New Jersey, all as of the close of business on April 30, 1958, for an *aggregate* consideration of \$633,661.41.” Ex. 30, at 1, ¶ 2. There is no evidence about how much finished inventory existed, or even the scale of the warehouse in which such products were stored. It is sheer speculation to infer that there was any given amount of finished product sold to Owens Corning Fiberglas in this manner. Second, there is no evidence to support the speculation that this undetermined amount of Kaylo was sold by Owens Corning Fiberglas to Badger Ordnance Works in late 1958 or 1959, as opposed to some other jobsite. Finally, as noted above, the objective evidence shows that Mr. Suoja was working for a contractor in 1958–59 that has never been shown to have worked at Badger Ordnance Works at any point in time.

his own work at Badger Ordnance Works in the late 1960s, it is clear from the testimony that the insulation product that he described was 85% magnesia – a product that Johns Manville made and Owens-Illinois did not. Mr. Schlub’s testimony was proven wrong by objective evidence 1) that Kaylo was an insoluble, calcium silicate insulation; 2) that Badger Ordnance Works originally was constructed with Johns Manville 85% magnesia insulation; and 3) that white asbestos insulation other than Owens-Illinois was installed at Badger Ordnance Works. George Schlub Dep. 12:1-22, 14:15-21, 24:5-11, 31:18-23, 34:3-7, 34:18-20, dkt. 154.

Even if the Court were to credit Mr. Schlub’s claimed use of “Kaylo” in the late 1960s to replace “deteriorated” insulation, the only reasonable inference is that the product was made by a different company. Ex. 29, at 1, 7, 8; Ex. 139, at 24; Ex. 30, at 1. It would require rank speculation to conclude – and run contrary to the credible evidence – that Mr. Schlub encountered an Owens-Illinois product made a decade before, and no witness testified as to how that supposedly happened. *Alexander*, 2015 WI App 28, at ¶ 26; *Miller*, 28 F. Supp. 3d at 831; *Harris*, 102 F.3d at 1429-31.

Mr. Suoja’s two other coworkers – Lawrence Zimmer and Harold Haase – did not testify that *Mr. Suoja* ever worked around Owens-Illinois Kaylo at Badger Ordnance Works. Harold Haase Dep. 22:4-24:18, dkt. 149; Lawrence Zimmer Dep. 25:22-27:1, dkt. 155-56. While Mr. Zimmer discussed his *own* work around “Kaylo” somewhere on the 10,000 acres at Badger Ordnance Works in late 1958, it would require guesswork and speculation to find that the product he identified was Owens-Illinois Kaylo and not Owens Corning Fiberglas Kaylo (or any other another manufacturer whose “smooth and

white” insulation was installed on 200 miles of steam lines). *Id.* at 25:22–27:1. It would also require pure speculation that Mr. Suoja – whose objective records show he did *not* work at Badger Ordnance Works in late 1958 – somehow found his way not only to Badger Ordnance Works, but also to the exact spot on a 10,000-acre jobsite where the Owens-Illinois Kaylo was purported used. *Alexander*, 2015 WI App 28, at ¶ 26; *Harris*, 102 F.3d at 1429–31.

Where, as here, under Wisconsin law “the matter remains one of pure speculation or conjecture *or the probabilities are at best evenly balanced*, it becomes the duty of the court to direct a verdict for the defendant.” *Alexander*, 2015 WI App 28, at ¶ 26 (citation omitted and emphasis original); *Miller*, 28 F. Supp. 3d at 831.

Even the sales invoices of Owens-Illinois Kaylo to Sprinkmann at Badger Ordnance Works in 1954 do not help the plaintiff carry his burden of proof. Ex. 32, at 1–6. Those sales took place many years *after* the Social Security records show that Mr. Suoja worked for Sprinkmann and more than a decade *before* the Social Security records show that he worked at Badger Ordnance Works for L&S Insulation. Ex. 1609, at 1, 5, 6. Badger Ordnance Works was an enormous worksite, which covered 10,000 acres and used massive quantities of insulation. There is no chain-of-custody evidence to show where any of the Owens-Illinois Kaylo was actually used, who actually installed it, how long it remained in place, or when it was actually removed (if ever) and by whom. Of the 200 miles (more than 1,056,000 linear feet) of overhead steam lines, the plaintiff’s sales invoices show that only 5,274 linear feet of Owens-Illinois Kaylo may have been used there – less than 0.5% of the total (assuming every line was only insulated once). Given

the timing of the Kaylo sales relative to Mr. Suoja and L&S Insulation's documented work at Badger Ordnance Works in 1968, only speculation built upon speculation could lead to a conclusion that Mr. Suoja was exposed to Owens-Illinois Kaylo. The evidence is insufficient under Wisconsin law to support such an inference. *See Miller*, 28 F. Supp. 3d at 831; *Alexander*, 2015 WI App 28, at ¶ 26.

The objective evidence—Social Security records, construction records, photographs, invoice data, contract ledger books—shows that Mr. Suoja's work at Badger Ordnance Works for L&S Insulation in 1968 involved insulation products that were *not* made by Owens-Illinois. No reasonable inference of exposure to Owens-Illinois Kaylo can be drawn based on the inconsistent, contradictory, anecdotal, aged, biased recollections of Mr. Suoja's co-workers. Taken together, the weight of the evidence shows that plaintiff failed to satisfy his burden and Owens-Illinois is entitled to a judgment in its favor. *See Fed R. Civ. P. 52(a); Kahn*, 680 F.3d at 786.

**2. The exclusion of Dr. Frank's "any exposure that is part of the cumulative exposure" causation theory precludes a finding of substantial-factor causation.**

---

Assuming the Court enforces the *Daubert* order excluding Dr. Frank's causation theory, the plaintiff's claims fail as a matter of law. Wisconsin and Seventh Circuit law requires the plaintiff to prove causation with competent expert testimony. *Smith v. Sofamor, S.N.C.*, 21 F. Supp. 2d 918, 921-22 (W.D. Wis. 1998) (citing *Ollman v. Wisconsin Health Care Liab. Ins. Plan*, 178 Wis. 2d 648, 667 (Wis. Ct. App. 1993)); *Myers v. Illinois Cent. R. Co.*, 629 F.3d 639, 643 (7th Cir. 2010); *Korte v. ExxonMobil Coal USA, Inc.*, 164 Fed. App'x 553, 557-58 (7th Cir. 2006); *Goffman v. Gross*, 59 F.3d 668, 672 (7th Cir. 1995). "[T]he lack

of expert testimony on the question of causation results in an insufficiency of proof where the issue involves technical, scientific or medical matters which are beyond the common knowledge or experience of jurors and the jury could only speculate as to what inference to draw.’” *Smith, S.N.C.*, 21 F. Supp. 2d at 921 (quoting *Ollman*, 178 Wis. 2d at 667); *Cali v. Danek Med. Inc.*, 24 F. Supp. 2d 941, 950 (W.D. Wis. 1998) (same); *Solar v. Kawasaki Motor Corps, USA*, 221 F. Supp. 2d 967, 971 (E.D. Wis. 2002) (same); *see also Kujawski v. Arbor View Health Care Ctr.*, 407 N.W.2d 249, 252–53 (Wis. 1987).

Here, without any admissible expert testimony drawing the specific causation between Mr. Suoja’s disease and his alleged exposure to asbestos from Owens-Illinois Kaylo, the plaintiff’s claims must be dismissed. That causation question is far beyond the ken of an average person. *Krist v. Eli Lilly & Co.*, 897 F.2d 293, 299 (7th Cir. 1990) (“Lacking scientific knowledge that an expert might have imparted to it but did not, no rational jury could bring in a verdict for the plaintiff.”).

**3. The credible evidence does not show that any claimed exposure to asbestos from Owens-Illinois Kaylo was a substantial factor.**

Alternatively, even if the Court were to allow Dr. Frank’s causation testimony, the plaintiff’s evidence falls short. Wisconsin has adopted the RESTATEMENT (SECOND) TORTS § 431 test for legal causation. In order to satisfy that test, the plaintiff must prove that Owens-Illinois Kaylo was a “substantial factor in bringing about” Mr. Suoja’s injury. *Merco Distributing*, 84 Wis. 2d at 458–59, 267 N.W.2d at 654; *Miller*, 28 F. Supp. 3d at 831; Wis. J.I.-Civil 1500 (Causation). In order to be considered a substantial factor, the product



“must have made a substantial contribution to the injury.” *Schultz v. Brogan*, 251 Wis. 390, 390–394; 29 N.W.2d 719, 721 (1947).

This Court cannot find that an alleged cause of an injury was a substantial factor without first comparing “the number of other factors which contribute in producing the harm and the extent of the effect which they have in producing it.” RESTATEMENT (SECOND) TORTS § 433(a). Without this comparative assessment, the whole concept of substantial factor causation would be turned on its head. *Cf. Moeller v. Garlock Sealing Techs.*, 660 F.3d 950, 954–55 (6th Cir. 2011). Simply put, “substantial” contribution does not mean “any” contribution to an injury, which the plaintiff has gone to great pains to argue was caused by a forty-year career as an insulation worker.

Exclusion of the plaintiff’s expert’s “any exposure” causation theory did not mean that he faced an impossible burden of proof. His experts could have attempted to analyze and quantify Mr. Suoja’s claimed exposure to Owens-Illinois Kaylo; analyzed and quantified Mr. Suoja’s lifetime occupational exposure to asbestos; reviewed the published literature concerning cancer causation and assessed the probability that the claimed exposure to Owens-Illinois Kaylo was a “substantial” contributing factor in the causation of Mr. Suoja’s injury. They chose not to do so, undoubtedly because the claimed exposure to Owens-Illinois Kaylo was so weak and insignificant in comparison to his aggregate occupational exposure over a forty-year career. *Krik*, 76 F. Supp. 3d at 753 (citing *Schultz v. Akzo Nobel Paints, LLC*, 721 F.3d 426, 431 (7th Cir. 2013)).

Mr. Suoja worked with myriad asbestos products over his forty-year career. Taking the plaintiff’s unsupported allegations of Owens-Illinois Kaylo exposure at face

value, Mr. Suoja's exposure to Owens-Illinois Kaylo would be limited to work at one jobsite for less than five or six months out of the 492 months he was employed as an asbestos worker. Even then, there is no evidence, expert or otherwise, from which this Court reasonably could determine the amount of asbestos from Owens-Illinois Kaylo to which Mr. Suoja might have been exposed, or how frequently the exposure might have occurred, or for what duration of time the alleged exposure might have lasted. Because any finding of liability on this evidence would be based purely on conjecture or speculation, it is the duty of the Court to direct a verdict for Owens-Illinois under Wisconsin law. *Merco*, 84 Wis. 2d at 460, 267 N.W.2d at 655; *see also Moeller*, 660 F.3d at 955 (reversing denial of judgment for defendant as matter of law, where, like here, the plaintiff's causation theory was "akin to saying that one who pours a bucket of water into the ocean has substantially contributed to the ocean's volume").

**4. There is no evidence of spoliation by Owens-Illinois.**

Having failed to carry his burden of proof, the plaintiff argues that an adverse inference born of "spoliation" should be used to fill the void. Pl.'s Post Trial Br. 25-26. Contrary to plaintiff's argument, Owens-Illinois answered discovery truthfully and did not intentionally destroy any evidence.

In order to draw any *adverse* inference that a party destroyed evidence containing adverse information, "[the court] must find that the party intentionally destroyed the [evidence] in bad faith." *Faas v. Sears, Roebuck & Co.*, 532 F.3d 633, 644 (7th Cir. 2008); *see also Trask-Morton v. Motel 6 Operating L.P.*, 534 F.3d 672, 681 (7th Cir. 2008) (A showing of bad faith "is a prerequisite to imposing sanctions for the destruction of evidence."). "The

crucial element is not that evidence was destroyed but rather the reason for the destruction.” *Faas*, 532 F.3d at 644 (citations and quotations omitted). A document is destroyed in bad faith if it is destroyed “for the purpose of hiding adverse information.” *Id.* (quoting *Rummery v. Ill. Bell Tel. Co.*, 250 F.3d 553, 558 (7th Cir. 2001)).

During discovery, Owens-Illinois told the plaintiff repeatedly that “the documents which relate to matters inquired about by these interrogatories were transferred to Owens Corning Fiberglas Corporation with the transfer of the business in question in 1958.” Ex. 29, at 1; Ex. 139, at 1–2; Ex. 30, at 3. That included records of Kaylo sales. In fact, Owens-Illinois told the plaintiff nearly eight years ago that plaintiff’s requested information is possessed not by Owens-Illinois, but by Owens Corning Fiberglas, and he may obtain information that source. Mot. Quash at 3, dkt. 8.

The plaintiff has not shown that Owen-Illinois ever destroyed evidence, let alone intentionally destroyed evidence in bad faith. Owens Corning Fiberglas has retained thousands of pages of sales invoices concerning Kaylo sales. *See id.* at Ex. A. Indeed, the plaintiff has relied on such invoices in this case, which belies the plaintiff’s unsupported claim of spoliation.

**5. The credible evidence does not show a culpable design defect.**

The plaintiff failed to present any credible evidence that Owens-Illinois was negligent, or Kaylo was unreasonably dangerous, due to a design defect. Wis. J.I.-Civil

3240 (Negligence); Wis. J.I.-Civil 3260 (Strict Liability); *Godoy ex rel. Gramling v. E.I. du Pont de Nemours & Co.*, 319 Wis. 2d 91, 110–15, 768 N.W.2d 674, 683–86 (Wis. 2009).<sup>12</sup>

**a. The presence of asbestos is not a design defect.**

The plaintiff's design defect claim boils down to an argument that Owens-Illinois should be held liable for including "asbestos" in an "asbestos product." Pl.'s Compl. ¶¶ 16, 23, dkt. 2. Wisconsin law is clear that a "claim for defective design cannot be maintained here where the presence of [a substance] is the alleged defect in design, and its very presence is a characteristic of the product itself." *Godoy*, 319 Wis. 2d at 110–15, 768 N.W.2d at 683–86.

*Godoy* involved a claim that the presence of lead in white lead carbonate pigment used in paint rendered the pigment defective in its design. In dismissing the claim, the Supreme Court of Wisconsin held, "Removing lead from white lead carbonate pigment would transform it into a different product. Under these circumstances, we conclude that the design of white lead carbonate pigment is not defective." *Id.* at 112–13, 768 N.W.2d at 684. The Court provided an analogy to demonstrate the point:

Foil can be made using ingredients other than aluminum-gold, for example—but aluminum foil cannot be made without aluminum. The presence of aluminum is characteristic of aluminum foil. If aluminum posed a hidden danger that the ultimate consumer would not contemplate, a manufacturer might be liable based on the failure to adequately warn or other claims.

---

<sup>12</sup> The plaintiff apparently concedes that, if the evidence does not establish strict liability, this Court need not consider the negligence claim. Pl.'s Post-Trial Br. 4. "Doubtless what he meant is that a claim of strict products liability is much like a negligence claim because it requires proof either that the product was unreasonably dangerous or, what amounts to the same thing, that it was defective." *Krien v. Harsco Corp.*, 745 F.3d 313, 317 (7th Cir. 2014) (citing, among others, *Godoy ex rel. Gramling v. E.I. du Pont de Nemours & Co.*, 306 Wis.2d 226, 743 N.W.2d 159, 162 (Wis. Ct. App. 2007)).

However, the manufacturer would not be liable based on the design of aluminum foil.

*Id.*

The plaintiff's evidence centered on a claim that the asbestos in Kaylo posed an unreasonable, hidden danger that insulators like Mr. Suoja, "Asbestos Workers," would not contemplate. As *Godoy* holds, that may be a failure to warn claim, but it is not, as a matter of law, a viable design defective claim. *Id.*

*Green v. Smith & Nephew AHP, Inc.*, 245 Wis. 2d 772, 629 N.W.2d 727 (Wis. 2001), decided before *Godoy*, is not to the contrary. There, the plaintiffs did not claim that latex gloves were designed defectively because they contained latex. Rather, the claim — and proof — was that the particular brand of gloves contained "excessive" amounts of latex and that gloves with a lower level of latex would not have caused the injury in question. *Id.* at 826, 629 N.W.2d at 752.

Here, the plaintiff offered no evidence in this case that putting a lower level of asbestos in Owens-Illinois Kaylo would have rendered the product harmless. The plaintiff's expert testified (over objection) to just the opposite, saying that there is no safe level of exposure to asbestos and that *any* occupational exposure to asbestos — no matter how slight — causes Mr. Suoja's disease. Frank Dep. 86:1–4, 99:13–15, 97:18–98:12, 99:16–100:2, dkt. 165. The plaintiff's theory of design defect, and claimed proof, run directly afoul of the Supreme Court of Wisconsin's decision in *Godoy*. 319 Wis. 2d at 112–13, 768 N.W.2d at 684.

The plaintiff offered no credible evidence that Owens-Illinois Kaylo — or any other high temperature asbestos insulation in the 1940s and 1950s — was or could have been made with non-asbestos substitutes. Asbestos was a characteristic ingredient of all high temperature asbestos insulation in the 1940s and 1950s. Trial Tr. 1-P-6:9-20; Ex. 1258, at 5144-5162. As the scientific literature shows, there were no available alternatives for asbestos in high-temperature asbestos thermal insulation products above 750° Fahrenheit in the 1940s and 1950s. As the plaintiff's purported industrial hygiene expert, Mr. Kenoyer, admitted:<sup>13</sup>

Q. This is the Tebb[e]ns (ph), Leroy Balzer, Clark Cooper, Tabershaw article, correct?

A. That's what it says, yes.

Q. That's the one you cited from 1970, right?

A. Yes. We do mention that one, yes.

Q. Can you go to the top of page 2, please? In this article the authors note: "However, at present there are no thermally suitable alternatives to asbestos-containing materials for the prevention of heat loss from high temperature (750 F. and higher) pipes and boilers," correct?

A. That's what it says.

Trial Tr. 1-P-6:9-20.

For these reasons, the plaintiff's design defect claim fails as a matter of Wisconsin law, and there was no admissible evidence of an actual defect in the product.

---

<sup>13</sup> Assuming the Court strikes Mr. Kenoyer's testimony, Owens-Illinois incorporated the exhibit's statements that were called to his attention on cross-examination. Trial Tr. 2-A-116:3-13.

**b. There is no credible evidence that the design of Owens-Illinois Kaylo was unreasonably dangerous.**

Even if the Court were to consider a design defect claim, it fails here as a matter of proof. A product is unreasonably dangerous only when it is “dangerous to an extent beyond that which would be contemplated by the ordinary user possessing the knowledge of the product’s characteristics which were common to the community.” Wis. J.I.-Civil 3260; *Sumnicht v. Toyota Motor Sales, U.S.A., Inc.*, 121 Wis. 2d 338, 367, 360 N.W.2d 2, 15 (1984).

The ordinary asbestos insulator’s expectations about Owens-Illinois Kaylo were made clear by the evidence that the insulator’s union recognized and told its membership of asbestos-related health hazards starting in 1930, and repeatedly thereafter. Exs. 1283, at 9; 1287, at 1; 1295, at 29; 1297, at 22; 1299, at 1. Indeed, Mr. Suoja’s claimed (though unproven) exposure to Owens-Illinois Kaylo at Badger Ordnance Works took place in the late 1960s, decades after the Asbestos Workers Union first warned its members about asbestos disease and just seven years after the “Grim Reaper” advertisement in 1961. Ex. 1295, at 29. No ordinary asbestos worker could have had an expectation in the 1960s that exposure to excessive levels of asbestos from asbestos products without using a respirator was safe after that 1961 advertisement.

Harold Haase, a fellow Local 19 union member and coworker of Mr. Suoja at Badger Ordnance Works, explained that it was common knowledge in the early 1960s that working with asbestos could be hazardous:

Q. When you started in the early '60s, there were older guys that took you aside and said that the trade was hazardous?

A. Oh, yes.

....

Q. And that's because it was common knowledge within the folks at Local 19 that working with asbestos could be hazardous?

A. Yes, I would assume that.

Q. You would say that. Right?

A. Well, it was -- it's like anything else, you know. Car exhaust is bad for you to breath too, and you don't walk around with a mask outside.

Q. But you don't sit in garages running your car either; do you? Right?

A. True.

Harold Haase Dep. 43:11-44:11, dkt. 149.

In view of the greater weight of the credible evidence, there is no disappointed consumer expectation in this case. The intended user was an insulator who indisputably knew he was working with asbestos insulation (he belonged to the "Asbestos Workers Union") and whose own union told him of the risks of his job and how to avoid them. The plaintiff offered no testimony to the contrary.

**6. The credible evidence does not show a culpable failure to warn.**

Whether proceeding in negligence or strict liability, in order to prove a culpable failure to warn, the plaintiff must establish that Owens-Illinois knew or should have known that a person in the position of Mr. Suoja—a union insulator in the 1940s and 1950s—was at risk of developing an asbestos-related injury from the reasonably foreseeable use of Owens-Illinois Kaylo. Wis. J.I.-Civil 3262 (Strict Liability); Wis. J.I.-Civil 3242 (Negligence); *Schiefer v. Keene Corp.*, 433 N.W.2d 32 nn.3-5, 146 Wis. 2d 870 nn.3-5 (Wis. Ct. App. 1988); *Kasun v. Owens-Illinois, Inc.*, 2001 WI App 224, ¶¶ 23-24, 247 Wis. 2d



989 (Wis. Ct. App. 2001); *Godoy*, 2009 WI 78, at ¶ 29, 319 Wis. 2d at 111, 768 N.W.2d at 683.

It is not enough to demonstrate that it was known in the relevant period that massive asbestos exposures at asbestos mines or in asbestos textiles mills could lead to asbestosis, or even lung cancer among individuals with asbestosis. Those exposures were significantly different from the intermittent exposures of insulators using finished products that were largely composed of ingredients other than asbestos. Ex. 228, at 8, 15–16; Ex. 1502, at 139.

By the 1940s and 1950s, it was clear that asbestos-related disease was dose-related. Ex. 1443, at 5, 17. As soon as medical science determined that massive asbestos exposure in asbestos mines and mills could lead to disease, researchers worked to determine what *level* of exposure to asbestos created that risk and, more importantly, what level of exposure could be tolerated without risk of disease. Ex. 1376, at 54–56.

The evidence in this case is uncontroverted that researchers reported as early as 1938 that, if asbestos exposures could be kept below 5 million particles of asbestos per cubic foot of air (5 mppcf), new cases of asbestosis would not arise. Ex. 1456, at 1–2. By 1946, the ACGIH—an independent body composed of industrial hygiene specialists who worked for government agencies or in academia—established a Threshold Limit Value for asbestos exposure of 5 mppcf. The ACGIH described the Threshold Limit Value as the level of exposure that a worker could have eight hours per day, five and a half days per week, for a working lifetime “without adverse effect.” Ex. 1386, at 178. Likewise, the State of Wisconsin described the Threshold Limit Value “to prevent the inhalation by

workmen of harmful dusts ... to an extent which may cause incapacitation, disability or in any way seriously injures any part of the body.” Ex. 1412, at 7.

Dr. William Lea, who headed the industrial hygiene section of the Wisconsin State Board of health in the 1950s and repeatedly visited Badger Ordnance Works, testified that the 5 mppcf safety standard for asbestos exposure was adopted under Wisconsin law and applied to Wisconsin workplaces; that, at the time, he believed that exposures to asbestos to levels below 5 mppcf on a time-weighted average basis “were safe”; and that no one challenged the safety of this standard during the relevant period. William Lea Dep. 39:21–40:5, 40:11–13, 48:18–49:3, dkt. 191; Ex. 1917–1953 (visits to Badger Ordnance Works). Dr. Lea also explained that the Threshold Limit Value was a “pure asbestos standard,” meaning that it applied only to the asbestos component of a mixed dust like Kaylo, which generally contained less than 20% asbestos. *Id.* at 34:22–35:4.

Dohrman Byers, a member of the Threshold Limits Committee of the ACGIH in the 1950s and an officer in the United States Public Health Service, confirmed the accuracy of Dr. Lea’s testimony. The asbestos Threshold Limit Value was “predicated on the idea that this level of exposure would be safe for eight hours per day, daily for the normal working individual.” Dohrman Byers Dep. 13:14–16, dkt. 193. Mr. Byers explained that there was a “safety factor” built into the Threshold Limit Value, meaning that the Threshold Limit Values were set below the level that the ACGIH actually thought would be safe (“if we thought twenty was a good, probably safe limit, we would recommend ten”). *Id.* at 15:21–16:6. Like Dr. Lea, he explained that the asbestos Threshold Limit Value “was set on the presumption of 100 percent asbestos” and that adjustments had to be

made when assessing the safe level of mixed dusts containing only a portion of asbestos. *Id.* at 17:6–18. Like Dr. Lea, he testified that the Threshold Limit Value for asbestos was not lowered from the 5 mppcf level until the late 1960s “because of the final evidence of carcinogenic potential.” *Id.* at 20:14–21:12.

The testimony of Dr. Lea and Mr. Byers is unimpeachable. Both were employed by the government during the relevant period and were members of the ACGIH. Neither was a paid witness. Both were personally in a position to know how the asbestos Threshold Limit Value was formulated, applied and understood in the 1950s. Both were highly respected in their field, Mr. Byers winning the Meritorious Achievement Award of the ACGIH and the Donald E. Cummings Award from the American Industrial Hygiene Association for outstanding contributions to the knowledge and practice of the profession of industrial hygiene. Byers Dep. 7:5–18; Trial Tr. 2-P-9:20–24; Ex. 1159, at 1.

The actual knowledge of Owens-Illinois was in complete accord with this evidence of constructive knowledge. Bill Hazard, the industrial hygienist who worked for Owens-Illinois during the relevant period, testified that he was aware of the asbestos Threshold Limit Value and that there was a “safety margin” built into the standard: “Yes, there was a safety margin. A person could be exposed to the Threshold Limit Value for his working lifetime and he would be safe. He would be below what the maximum his body would accept.” Hazard Dep. 111:5–8, dkt. 150. Before joining Owens-Illinois, Mr. Hazard worked for the United States Public Health Service and was a member of the ACGIH. *Id.* at 17, 112, 117–18. Like Dohrman Byers, Mr. Hazard received the Donald E. Cummings award. Trial Tr. 2-P-10:3–5; Ex. 1159, at 1.

The *post hoc* rationalization of plaintiff's industrial hygiene expert, Mr. Kenoyer, that the asbestos Threshold Limit Value was not actually safe because workers exposed below that level began developing asbestos disease in the 1960s is flawed on two levels. First, Mr. Kenoyer has no established credentials or expertise in industrial hygiene, and no actual experience in the field during the relevant time period in this case. Second, post-1950s developments in medical science cannot, as a matter of law, be the basis for establishing actual or constructive knowledge on the part of Owens-Illinois during the 1950s that the Threshold Limit Value as not a safe level of exposure. Wis. J.I.-Civil 3262 (Strict Liability); Wis. J.I.-Civil 3242 (Negligence); *Schiefer*, 433 N.W.2d at 32 nn.3-5, 146 Wis. 2d at 870 nn.3-5; *Kasun*, 2001 WI App 224, at ¶¶ 23-24, 247 Wis. 2d at 989.

The weight of the credible evidence is that the 5 mppcf asbestos Threshold Limit Value was considered to be a safe level of exposure in the 1940s and 1950s. That principle is of core importance because there is no dispute in this record that insulators like Mr. Suoja were exposed *below* the recognized safe level of exposure on a time-weighted average basis. Ex. 228, at 14-15; Ex. 1376, at 55; Ex. 1386, at 181; Ex. 1388, at 65-143; Ex. 1412, at 12 & Rev. 4. Retrospective observations by the plaintiff's "experts" that such exposures are *now* known to cause disease are irrelevant to the duty to warn at the time of manufacture in the 1950s. Wis. J.I.-Civil 3262 (Strict Liability); Wis. J.I.-Civil 3242 (Negligence); *Schiefer*, 433 N.W.2d at 32 nn.3-5, 146 Wis. 2d at 870 nn.3-5; *Kasun*, 2001 WI App 224, at ¶¶ 23-24, 247 Wis. 2d at 989.

The first comprehensive industrial hygiene report concerning the exposure levels of insulation workers (as opposed to asbestos miners or factory workers) came in 1946 in

the Fleischer-Drinker report, a study of four Navy and Maritime Commission shipyards during World War II — a period of frantic shipbuilding. The Fleischer-Drinker report included detailed dust counts taken at the potentially dustiest operations of the insulation trade, and both *total* dust counts and the more relevant *asbestos* dust counts were listed. As subsequent researchers confirmed, those asbestos dust counts were below the asbestos Threshold Limit Value on a time-weighted average basis, something even the plaintiff's own "expert" admitted:

Q. [T]he asbestos dust levels in Fleischer Drinker were 'generally within the 5 million particles per cubic foot permissible limit' according to Dr. Selikoff, right?

A. That's what he's saying there; yes, sir.

Q. Can you identify for the Court a single article published in the peer-reviewed literature, anywhere in the world, in any language, that said ... that users of finished insulation products were being exposed above the threshold limit value?

A. In what time period?

Q. Before 1965.

A. I'm not aware of one before 1965.

Trial Tr. 1-P-23:11-24:6.<sup>14</sup>

Again, the actual knowledge of Owens-Illinois comports with this evidence of constructive knowledge. Mr. Hazard of Owens-Illinois was educated in industrial hygiene at the Harvard School of Public Health by Philip Drinker; he held a patent with Mr. Drinker for a dust collecting device; he was recommended for his job at Owens-Illinois by Mr. Drinker. The evidence is undisputed that Owens-Illinois subscribed to the

---

<sup>14</sup> Assuming the Court strikes Mr. Kenoyer's testimony, Owens-Illinois incorporated the exhibit's statements that were called to his attention on cross-examination. Trial Tr. 2-A-116:3-13.

journal in which the Fleischer Drinker article was published and that Mr. Hazard actually read the article when it was published in 1946: “When you know a person that well and have such respect for him, you are pretty darn right you are going to read the article that he writes.” Hazard Dep. 119, dkt 150.

Mr. Hazard had a clear understanding of the conclusion of the Fleischer-Drinker report about whether insulation workers like Mr. Suoja were at risk of asbestos-related disease: “They concluded that the occupation of insulation insulators was a safe one.” *Id.* at 104.

William Fluck, who was an industrial hygienist at the Wisconsin State Board of Health during the relevant period, also read and attested to the authoritative nature of the Fleischer Drinker report and the high regard in the profession for Philip Drinker: “I would consider it authoritative, because this gentleman, Philip Drinker, was a very highly respected industrial hygienist.” Fluck Dep. 35:2-12, dkt. 192. Dr. Peter Neushul, an historian who specializes in the history of 20th Century technology and science, testified without contradiction that Philip Drinker was “the preeminent authority on dust in the United States ... in the 20th Century.” Trial Tr. 2-A-120:16-18.

The conclusion of the Fleischer-Drinker report that insulation work was “not a dangerous occupation” was built upon two pillars. Ex. 228, at 16. First, the asbestos dust counts of insulators were below the Threshold Limit Value for asbestos. *Id.* at 14-15. Second, an x-ray study of 1,074 insulators showed only three cases of asbestosis, and it was recognized in the article that some of the insulators had asbestos exposure in

industry before ever working in the shipyards. There was no evidence of cancer among the insulators at all. *Id.* at 16.

As Dr. Neushul noted, again without contradiction, the conclusions of the Fleischer Drinker report were not challenged during the entire period when Owens-Illinois made Kaylo, or for several years beyond:

Q. Between 1946 and the mid-1960s, was there any publication in the peer-reviewed literature in the world that said that the conclusions in Fleischer Drinker were wrong?

A. No.

Trial Tr. 2-P-3:21-25.

The plaintiff's argument that the reported incidence of cancer in asbestos factory workers who had developed asbestosis in England (due to massive levels of asbestos dust before the British started regulating asbestos exposure levels) cannot blunt the truth about the state of the art in the 1950s concerning insulation workers like Mr. Suoja. Insulation workers in the field were recognized to have exposures below the Threshold Limit Value, which distinguished them from miners and factory workers who were reported to have asbestosis and cancer. Ex. 1497, at 600 ("These men were not asbestos weavers nor asbestos miners, and nobody at that time had suggested an increased risk at all for insulation workers."). As the plaintiff's own "expert" admitted, there was no evidence that insulators were at risk of developing asbestos-related cancer in the 1940s or 1950s:

Q. Can you identify for the Court a single article published anywhere in the peer-reviewed literature, in any language, anywhere in the

world, before 1965 that said that users of finished insulation products were at risk of getting cancer?

A. Not that I'm aware of.

Trial Tr. 1-P-24:7-9.<sup>15</sup>

All that the plaintiff is left with is the argument of his counsel that Owens-Illinois should have known that insulators were at risk of disease, despite the fact that the published scientific literature reached exactly the opposite conclusion in the 1940s and 1950s. This argument is irretrievably tainted by hindsight bias, born of reports in the 1960s by Dr. Selikoff and others that insulation workers were developing asbestos-related diseases despite having been exposed to asbestos below the asbestos Threshold Limit Value. Those reports in the 1960s—many years after Owens-Illinois stopped making Kaylo—cannot, as a matter of law, be the basis for a finding that Owens-Illinois knew or should have known about asbestos-related health risks to insulation workers like Mr. Suoja when it manufactured Kaylo in the 1940s and 1950s. Wis. J.I.-Civil 3262 (Strict Liability); Wis. J.I.-Civil 3242 (Negligence); *Schiefer*, 433 N.W.2d at 32 nn.3-5, 146 Wis. 2d at 870 nn.3-5; *Kasun*, 2001 WI App 224, at ¶¶ 23-24, 247 Wis. 2d at 989; *Godoy*, 2009 WI 78, at ¶ 29, 319 Wis. 2d at 111, 768 N.W.2d at 683.

**7. The Saranac animal study altered none of the foregoing.**

The plaintiff's reliance on the results of an animal study concerning the Kaylo product conducted by the Saranac Laboratory is completely misplaced. The study was

---

<sup>15</sup> Assuming the Court strikes Mr. Kenoyer's testimony, Owens-Illinois also incorporated the exhibit's statements that were called to his attention on cross-examination. Trial Tr. 2-A-116:3-13.



done, at the request Owens-Illinois, because the Kaylo product—then still in the pilot plant stage—involved a manufacturing process that had the potential to alter profoundly the raw ingredients of the product, which included silica and asbestos. As Saranac Laboratory noted at the outset, it was not even clear that dust from the finished product would be in a “form as to be inhalable.” Ex. 1058, at 1.

In order to find the answer to Owens-Illinois’s question about potential change in the raw ingredients, Saranac Laboratory exposed three species of laboratory animals to massive doses of Kaylo dust, 115 to 125 mppcf for eight hours a day, five and a half days per week, for the lifetimes of the animals. Ex. 1108, at 3–5.<sup>16</sup> Saranac Laboratory generated a dust cloud using a rotating paddle and required the animals to live in the accumulated dust piles the rest of the day. *Id.* As Dr. Neushul explained, “[T]his is a protocol that was invented at Harvard by Cecil Drinker, who’s Philip Drinker’s brother, and his sister-in-law, Catherine Drinker, for putting animals in a situation where you could expose them to as much dust as possible.” Trial Tr. 2-P-19:3–7.

The first reports from Saranac Laboratory were that the manufacturing process did appear to alter the silica and asbestos used in Kaylo because there was *no* evidence of

---

<sup>16</sup> Cf. *C.W. ex rel. Wood v. Textron, Inc.*, 807 F.3d 827, 831 (7th Cir. 2015) (“Take, for example, the rejected study that analyzed the carcinogenic effect of vinyl chloride on lab rats. This study found no statistically significant increase in the number of tumors developed by rats that were fed 0.03 milligrams of vinyl chloride per kilogram of bodyweight, (0.03 mg/kg), of vinyl chloride per day (4 to 5 days per week, for 59 weeks), over the control group of rats that were fed only olive oil.... And the rats ingested it over a period of time much longer, at least in rat years, than the children's exposure here. Given these facts, Dr. Ryer-Powder's conclusion that this study shows that C.W. and E.W. are now at an increased risk of developing cancer was an inferential leap that the district court was rightly unwilling to make.” (citation omitted)).

silicosis or asbestosis in any of the animals, despite the extreme exposure conditions. Trial Tr. 2-P-19:1-11. It was only in late 1948, after five years of study, that Saranac Laboratory found fibrosis similar to asbestosis in nine guinea pigs. It never found any such fibrosis in the other species of animals used; it found no cancer whatsoever in *any* of the three species of animals. Ex. 1116, at 347; Ex. 1108, at 1-18.

The Saranac animal tests were not a test of the safety of the asbestos Threshold Limit Value, as the experiments were conducted at levels many times greater than the Threshold Limit Value. Rather, the tests revealed nothing more than that, at excessive levels, the asbestos in Kaylo had not lost its capacity to cause lung fibrosis due to the manufacturing process. The Threshold Limit Value remained the line of demarcation between a safe and an excessive exposure.

Saranac Laboratory did not tell Owens-Illinois to stop making Kaylo, or to take the asbestos out of Kaylo, or to put a warning label on Kaylo. Trial Tr. 2-P-17:25-18:8; Hazard Dep. 125-126, dkt. 150. Rather, Saranac Laboratory told Owens-Illinois to x-ray its manufacturing plant workers regularly to make sure there was no evidence of asbestos disease. Ex. 1103, at 5-7. Owens-Illinois did so and, throughout the period that it operated its Kaylo Division, no Owens-Illinois employee was found to have asbestos disease. Hazard Dep. 123-24, dkt. 150.

Saranac Laboratory also told Owens-Illinois that it should allow Saranac to study dust conditions in its manufacturing plant. Ex. 1066. Again, Owens-Illinois agreed. The 1951 dust study conducted by Saranac Laboratory confirmed 1) that the applicable safety standard was the 5 mppcf asbestos Threshold Limit Value; 2) that the Threshold Limit

Value applied to only the asbestos component of a mixed dust like Kaylo (Saranac Laboratory analyzed the dust to determine the asbestos component); and 3) that Owens-Illinois generally had very good dust control in its manufacturing plant. Ex. 1103, at 5-7. Saranac nonetheless recommended a few adjustments in its dust control, all of which Owens-Illinois followed. *Id.* at 7-8.

None of the foregoing evidence establishes that Owens-Illinois owed or breached any duty to warn insulators like Mr. Suoja. There is no permissible inference on this record that Owens-Illinois knew or should have known that such insulators were at risk of developing asbestos-related disease from exposure below the asbestos Threshold Limit Value. Wis. J.I.-Civil 3262 (Strict Liability); Wis. J.I.-Civil 3242 (Negligence); *Schiefer*, 433 N.W.2d at 32, 146 Wis. 2d at 870; *Kasun*, 2001 WI App 224, at ¶¶ 23-24, 247 Wis. 2d at 989; *Godoy*, 2009 WI 78, at ¶ 29, 319 Wis. 2d at 111, 768 N.W.2d at 683.

**8. The lack of a product warning was not a proximate cause of Mr. Suoja's asbestos exposure and injury.**

Even if the plaintiff had proven a culpable failure to warn on the part of Owens-Illinois, his failure to warn causes of action would fail for an independent reason. The plaintiff has failed to prove proximate cause. The weight of the credible evidence is that the absence of a warning label on Owens-Illinois Kaylo was not the reason that Mr. Suoja was exposed to asbestos, as and when he was, or of Mr. Suoja's failure to take any personal precautions with respect to such exposure. *Schreiner v. Wieser Concrete Prods., Inc.*, 294 Wis. 2d 832, 838 (2006); *Kurer v. Parke, Davis & Co.*, 272 Wis. 2d 390, 409 (Wis. Ct. App. 2004) ("Absent proof that a more complete or explicit warning would have

prevented [plaintiff's] use of [the product], she cannot establish that [defendant's] alleged failure to warn was the proximate cause of her injuries."); *Sub-Zero, Inc. v. Gen. Elect. Co.*, No. 09-cv-00497-WMC, 2010 WL 3584427, at \*5 (W.D. Wis. Sept. 10, 2010) (same); *Forst v. SmithKline Beecham Corp.*, 602 F. Supp. 2d 960, 970 (E.D. Wis. 2009) (same).

The weight of the objective evidence is that, while it was clear in the 1940s and 1950s that excessive exposure to asbestos over a prolonged period of time could cause asbestosis, it was also clear that there was a level of exposure that was deemed by industrial hygiene experts to be safe. Ex. 228, at 16; Byers Dep. 13:4–21:12, dkt. 193; Lea Dep. 39:21–40:5, 40:11–40:13, 48:18–49:3, dkt. 191; Trial Tr. 2-P-82:24–83:10 (Gregory). There were well-established industrial hygiene techniques for avoiding excessive asbestos exposures, including local ventilation, segregation of dusty processes, wetting techniques, and respirators designed for dusty operations. Ex. 228, at 11–15; Ex. 1412, at 13–20; Ex. 1573, at 23–24. These protective measures were discussed in published literature (Ex. 228, at 14–16) and were incorporated into governmental standards (Ex. 1412, at 13–20, Ex. 1573, at 23–24), which applied to the very workplace where the plaintiff claims Mr. Suoja was exposed to Owens-Illinois Kaylo, Badger Ordnance Works. Trial Tr. 2-A-113:21–115:3; Trial Tr. 2-P-107:25–109:25; Trial Tr. 2-P-112:8–15.

There is no dispute that Badger Ordnance Works and Mr. Suoja's employers knew that they were obliged to protect workers from excessive exposures to asbestos. They are presumed to know what the law requires. *Putnam v. Time Warner Cable of Se. Wisconsin, Ltd.*, 255 Wis. 2d 447, 458 n.4, 649 N.W.2d 626, 632 n.4 (Wis. 2002) ("every person is presumed to know the law"); Wis. J.I.-Civil 1900.2 (Safe-Place Statute-Owner); Wis. J.I.-

Civil 1900.4 (Safe-Place Statute-Employer). L&S Insulation had a respirator program. Elmer Borchardt Dep. 42-43, dkt. 185. There is nothing that was on, or not on, a box of Owens-Illinois Kaylo that could have required anything to occur at Badger Ordinance that was not already required under Wisconsin and federal law. Trial Tr. 2-P-107:8-108:22, 2-P-112:8-15.

Nor is there any evidence that a warning label on Owens-Illinois Kaylo would have told Mr. Suoja anything that the Asbestos Workers Union did not tell Mr. Suoja in the *Asbestos Workers Journal* that was sent directly to Mr. Suoja's home. Trial Tr. 2-P-113:4-114:12. The *Asbestos Worker Journal* first published the health risks of excessive exposure to asbestos to its members in 1930 in an article entitled "The 'Pulmonary Asbestosis' Menace." Ex. 1283, at 9; Trial Tr. 2-A-118:13-119:6. The *Asbestos Worker Journal* reported to Mr. Suoja in 1957 that his union, "being well aware of the health hazards in the Asbestos industry," was going to sponsor a scientific study of the health hazards to its members. Ex. 1287, at 1.

Perhaps most notably, the November 1961 edition of the *Asbestos Worker Journal* included the "Grim Reaper" ad, which admonished all insulators, including Mr. Suoja, to wear a respirator to avoid spending their future "with him." Ex. 1295, at 29; Trial Tr. 2-P-8:5-19, 2-P-113:9-12. When, in the mid-1960s, union-sponsored health research resulted in a seminal article by Dr. Selikoff about asbestos disease occurring among insulators despite the fact that their asbestos exposures did not exceed the Threshold Limit Value, the article was reprinted in full in the *Asbestos Worker Journal*. Ex. 1300, at 5. Again, it was delivered to Mr. Suoja at his home. Trial Tr. 2-P-7:3-8, 2-P-114:4-12.

Following the published work by Dr. Selikoff, the evidence is that companies still making insulation products did place warning labels on boxes of thermal insulation products containing asbestos. Trial Tr. 2-P-114:21-115:2.

Despite this strong evidence that Mr. Suoja, his union, and his employer knew about the hazards of excessive asbestos exposure and how to avoid them, and that, in the 1960s, warning labels were placed on asbestos products, there is no evidence in this record that Mr. Suoja ever changed his work habits to avoid excessive asbestos exposure. Mr. Suoja did not so testify. His co-workers testified that work practices did not change. George Schlub Dep. 15:1-15, 42:5-11, dkt. 154; Harold Haase Dep. 98:1, dkt. 149. The union reported to its members the findings of Dr. Selikoff that, despite Dr. Selikoff's repeated warnings to union members, respirator use remained abysmally poor. Ex. 1313, at 3; Trial Tr. 2-P-12:7-13:13-20.

This Court is being asked by the plaintiff to speculate that, had there been a warning label on Owens-Illinois Kaylo, Mr. Suoja would have protected himself from excessive asbestos exposure, but there is no evidence to support such speculation. Proving proximate cause regarding the absence of a warning by Owens-Illinois is an essential element of the plaintiff's case. It is not a defense. The plaintiff bears the burden of proof with credible evidence. He has failed to carry that burden. *Schreiner*, 294 Wis. 2d at 838; *Kurer*, 272 Wis. 2d at 409; *Sub-Zero, Inc.*, 2010 WL 3584427, at \*5; *Forst*, 602 F. Supp. 2d at 970.

**B. Plaintiff Failed to Prove Damages by the Greater Weight of the Credible Evidence.**

---

**1. Plaintiff has no cognizable wrongful death claim.**

Wisconsin law does not allow separate wrongful death claims. Wis. Stat. § 895.04(3); *Delvaux v. Vanden Langenberg*, 130 Wis. 2d 464, 494, 387 N.W.2d 751, 764 (1986) (Wisconsin “statutes do not provide for separate wrongful death actions concerning the same wrongful death.”).

In a prior state court lawsuit, Delores Suoja brought all claims individually (a wrongful death claim for loss of society and companionship) and as special administrator of the Estate (a survival claim for damages sustained before death). Ex. 1618, at 1–2. She litigated, recovered, and dismissed all claims and causes of action with prejudice as the surviving spouse (the wrongful death claim) and for the Estate (the survival claim). Ex. 1671–80; Court Record Events at 1, Wisconsin Circuit Court Access (WCCA), dkt. 105-20.

Because Mrs. Suoja’s state wrongful death claim and this wrongful death claim were never consolidated, the plaintiff here has no cognizable wrongful death claim at all and the claim should be dismissed under Wisconsin law. Wis. Stat. § 895.04(3); *Delvaux*, 130 Wis. 2d at 494, 387 N.W.2d at 764.

**2. Plaintiff and Kim Suoja admit there are no remaining damages.**

The plaintiff and Kim Suoja admitted that there are no remaining damages and they convinced two separate courts to accept their position. This Court should accept their sworn admissions to other courts – which they confirmed at trial for this Court – as unimpeachable evidence that there are no remaining damages.

In 2009, Kim Suoja filed for bankruptcy and declared under oath that she had no contingent interests in the estate of Mr. Suoja and no contingent or unliquidated claims of any nature. Trial Tr. 1-P-92:15-97:3, Ex. 1941, at 10. Based on her sworn statements, the Western District of Wisconsin granted Ms. Suoja a discharge. Trial Tr. 1-P-97:4-11, Ex. 1942, at 1.

Similarly, in 2002, the plaintiff was appointed as special administrator of the Estate of Mr. Suoja in the Circuit Court of Douglas County to prosecute an action on behalf of the Estate of Mr. Suoja. Exs. 1705-18. He was discharged when, in 2006, he declared under oath that all of the assets of the estate had been collected and disbursed, that all of the valid claims had been made, and that all of the money had been collected and disbursed. Trial Tr. 2-A-54:13-57:2.

Where, as here, a person takes a clearly inconsistent position and convinces a court to accept that position, judicial estoppel applies. *Biesek v. Soo Line R. Co.*, 440 F.3d 410, 411-12 (7th Cir. 2006) (dismissing personal injury claim because plaintiff representation that he had no contingent and unliquidated claims); *Matter of Cassidy*, 892 F.2d 637, 642 (7th Cir. 1990). Given the plaintiff's and Ms. Suoja's position that there are no remaining damages and their ability to convince two separate courts to accept their position, they cannot pursue the damages here against Owens-Illinois. *Biesek*, 440 F.3d at 414.

**3. Owens-Illinois is not responsible for others' fault.**

Contrary to plaintiff's argument (Pl.'s Post-Trial Br. 180-88), Owens-Illinois is responsible only for its share of the total damages and not responsible for others' fault. *Conner v. West Shore Equip. of Milwaukee, Inc.*, 68 Wis. 2d 42, 45, 227 N.W.2d 660, 662 (Wis.



1975); *Kasun*, 2001 WI App 224, at ¶¶ 32–34, 247 Wis. 2d at 989; *Bushmaker v. A.W. Chesterton Co.*, No. 09-CV-726-SLC, 2013 WL 11079371, at \*13 (W.D. Wis. Mar. 1, 2013). Wisconsin law provides for modified several liability where “all whose negligence may have contributed to the arising of the cause of action” should be included on the verdict form to allow the necessary allocation of any liability. *Conner*, 68 Wis. 2d at 45, 227 N.W.2d at 662; *Kasun*, 2001 WI App 224, at ¶¶ 32–34.

The law in Wisconsin is clear: failure to include on a verdict form every person or entity that may have been partially responsible for the claimed injury “would be prejudicial to the remaining non-settling defendant,” and “it would [be] error to exclude them.” *Conner*, 68 Wis. 2d at 45, 227 N.W.2d at 662. This rule applies to every person or entity that may have contributed to causation of the injury, even if the person or entity is not a party, and indeed even if it cannot be sued: “At the requested-special-verdict stage of a lawsuit, it is immaterial that the entity is not a party or is immune from further liability.” *Id.* The “only . . . question” that “must be affirmatively answered by the trial judge” to require the inclusion of the person or entity on the verdict form is: “Is there evidence of conduct which, if believed by the jury, would constitute negligence on the part of the person or other legal entity inquired about.” *Id.* If any such evidence exists, it is “necessary” to include the person or entity on the verdict form, and reversible error not to do so. *Id.* at 45–46, 227 N.W.2d at 662–63.

This allocation is required both to uphold Wisconsin’s comparative negligence law and to uphold the terms of *Pierringer* releases of settled defendants. In Wisconsin, a defendant at verdict is entitled to reduce the verdict by the percentage of responsibility

of settled defendants. *Pierringer v. Hoyer*, 21 Wis. 2d 182, 191-92, 124 N.W.2d 106, 111 (Wis. 1963). As the Court expressly held, “such percentage of negligence can only be determined by a proper allocation of all the causal negligence” by the jury, and “[t]he determination of this issue between the plaintiff and the nonsettling defendant does not require the settling defendants to remain parties because the allocation, if any, of the causal negligence to the settling tort-feasors is merely part of the mechanics by which the percentage of casual negligence of the nonsettling tort-feasor is determined.” *Id.*

Here, there is uncontested evidence that Mr. Suoja was exposed to asbestos from a multitude of products for which Owens-Illinois has no liability. The evidence shows the companies that made those products or otherwise cause the exposures. At a minimum, the Court must consider and apportion liability among: Mr. Suoja; each of Mr. Suoja’s employers; each owner of the premises where Mr. Suoja worked; and each asbestos product to which Mr. Suoja was exposed. *Conner*, 68 Wis. 2d at 45, 227 N.W.2d at 662; *Kasun*, 2001 WI App 224, at ¶¶ 32-34.

Additionally, the Court must consider and apportion liability among the entities who settled and executed *Pierringer* releases: National Gypsum Company, Raytech Corporation, Babcock & Wilcox, Building Service Industrial Sales Company, Inc., Eagle-Picher Industries, Fiberboard Corporation, Garlock Inc., General Electric, Owens Corning Fiberglas, Johns Manville, Union Asbestos & Rubber Co. (UNARCO/UNR), Celotex Corporation, H K Porter, Rapid American Corporation, and Sprinkmann Sons Corporation. Exs. 1654-80.

Against Wisconsin law and this Court's prior decision, the plaintiff argues that, in *Fuchsgruber v. Custom Accessories, Inc.*, 2001 WI 81, ¶ 2, 244 Wis. 2d 758, 763, 628 N.W.2d 833, 836 (Wis. 2001), the Wisconsin Supreme Court altered the rules governing apportionment of liability in strict liability cases. Pl.'s Post-Trial Br. 184.<sup>17</sup>

As this Court held when the plaintiff's counsel made this argument in previous cases, *Fuchsgruber* does not alter Wisconsin law regarding apportionment of liability.

*Fuchsgruber* presented a different situation because it involved one product—a hydraulic jack—and three defendants involved in the chain of distribution (the manufacturer, distributor and retailer). The state supreme court held that under such circumstances, in strict liability cases, the jury first had to compare the plaintiff's conduct to the product's defectiveness and then, in a separate question, apportion liability among the various defendants involved in the manufacture, distribution and sale of that one product. Here, there are several possible products that could have contributed to plaintiff's injuries but each of those products involved only one company in the chain of distribution. The combined question related to comparative fault in this case appropriately compares plaintiff's conduct to the alleged defectiveness of each of those products, as well as to the alleged negligence of defendant and possibly other companies.

*Bushmaker*, 2013 WL 11079371, at \*13 (citations omitted); see also Trial Tr. 1192:10–12, *Gosz v. American Standard, Inc.*, Case No. 05-cv-9218 (Wis. Cir. Ct. Milwaukee Cty. Nov. 10, 2008) (holding that asbestos cases are “different from *Fuchsgruber* because there are different products which are not interchangeable”), dkt. 141.

---

<sup>17</sup> The Plaintiff did not submit any proposed special verdict, and this argument should be deemed waived.

**C. Plaintiff's Claims Are Time Barred Under the Federal Enclave Doctrine.**

The plaintiff's claims are barred by a two-year statute of limitations, under the federal enclave doctrine and Wis. Stat. § 330.21(3) (1942), because Mr. Suoja died on December 29, 1996 and the plaintiff's complaint was filed on August 5, 1999.

**1. The federal enclave doctrine applies to Badger Ordnance Works.**

Under the federal enclave doctrine, the Constitution allows only Congress to regulate properties acquired from the states and therefore the state law at the time of acquisition must apply to the land. *See* U.S. Const. art. I, § 8, cl. 17; *James Stewart & Co. v. Sadrakul*, 309 U.S. 94, 99 (1940); *Allison v. Boeing Laser Tech. Servs.*, 689 F.3d 1234, 1237 (10th Cir. 2012); *Koren v. Martin Marietta Servs., Inc.*, 997 F. Supp. 196, 202 (D.P.R. 1998). The doctrine includes the state's statute of limitations at the time of the acquisition. *Adams v. Alliant Techsystems Inc.*, 218 F. Supp. 2d 792, 799–800 (W.D. Va. 2002).

Here, the Badger Ordnance Works became a federal enclave on March 1, 1942. Ex. 1762, at 2; Ex. 1724, at 61; Ex. 1725, at 58; Ex. 1726, at 50. The United States acquired the Badger Ordnance Works land by condemnation, and “[i]t is well established that land which the Government acquires by condemnation has been ‘purchased’ within the meaning of Clause 17.” *United States v. State Tax Comm’n of Miss.*, 412 U.S. 363, 373 (1973). Additionally, the Wisconsin legislature ceded jurisdiction over the land to the United States. Wis. Stat. § 1.02 (1935); Ex. 1724, at 61; Ex. 1725, at 58; Ex. 1726, at 50.

**2. The two-year statute of limitations bars the plaintiff's claims.**

When the United States acquired the Badger Ordnance Works land on March 1, 1942, Wisconsin had a two-year statute of limitations. Wis. Stat. § 330.21(3) (1942),

available at <http://goo.gl/lo8op0>. The two-year statute of limitations was later repealed by Ch. 650, Laws of 1961, which took effect in 1962 and created the current, longer, three-year statute of limitations. Wis. Stat. § 330.205(2) (1961), available at <http://goo.gl/snUwDK>; see *Haase v. Sawicki*, 20 Wis. 2d 308, 310–11, 121 N.W.2d 876, 878 (1963). The three-year statute does not apply here because the plaintiff only claims that Mr. Suoja was exposed to Owens-Illinois Kaylo at Badger Ordnance Works and the state law at the time of acquisition (1942) must apply to causes of action arising on this federal land. *Allison*, 689 F.3d at 1237; *Adams*, 218 F. Supp. 2d at 799–800.

There is no dispute that Mr. Suoja died on December 29, 1996 (Ex. 22, at 1), Mr. and Mrs. Suoja knew of the wrongful cause (Trial Tr. 2-A-52:3–53:3; Ex. 1722A), and yet the complaint was filed more than two years later on August 5, 1999 (Pl.’s Compl., ECF No. 1). Accordingly, the plaintiff’s claims are time barred and should be dismissed. Wis. Stat. § 330.21(3) (1942).

**D. Plaintiff’s Failure to Warn Claims Are Barred by the Sophisticated User Doctrine.**

---

The plaintiff’s failure to warn claims are barred by the “sophisticated user” doctrine because Owens-Illinois had no duty to warn purchasers and employers about known potential hazards of asbestos. *Haase v. Badger Mining Corp.*, 266 Wis. 2d 970, 983–84 (Wis. Ct. App. 2003); *Mohr v. St. Paul Fire & Marine Ins. Co.*, 2004 WI App 5, ¶ 15, 269 Wis. 2d 302, 318, 674 N.W.2d 576, 584 (Wis. Ct. App. 2003). Wisconsin courts have outlined two major policy reasons for the sophisticated user doctrine:

First, it places the duty to warn on the party arguably in the best position to ensure workplace safety, the purchaser-

employer. Second, the burden falls upon the party in the best position to know of the product's potential uses-thereby enabling that party to communicate safety information to the ultimate user based upon the specific use to which the product will be put.

*Haase*, 669 N.W.2d at 743.

Under this doctrine, a manufacturer has no duty to warn the user of a potential hazard that is known to his employer. *Id.* at 983–84. Thus, if Mr. Suoja's employers already knew that asbestos dust should be kept below 5 mppcf, then Owens-Illinois had no duty to warn at all. *Id.*; *Strasser v. Transtech Mobile Fleet Service, Inc.*, 2000 WI 87, ¶58, 236 Wis. 2d 435, 613 N.W. 142 (Wis. Ct. App. 2000); Wis. JI-Civil 3242 (Negligence); Wis. JI-Civil 3262 (Strict Liability). There is no question that Mr. Suoja's employers knew that asbestos could be hazardous at levels above 5 mppcf and knew how to control dust to prevent exposures above that threshold. Trial Tr. 2-A-113:21–115:3; Trial Tr. 2-P-107:25–109:25; Trial Tr. 2-P-112:8–15; Ex. 1412, at 12 & Rev. 4; Ex. 1573, at 23–24.

By 1947, the Wisconsin Industrial Commission informed all Wisconsin employers that exposures to asbestos in concentrations above 5 mppcf could be hazardous to workers. Ex. 1412, at 12 & Rev. 4. The Commission's safety orders required employers to take measures, including installing worksite ventilation and providing respirators, to prevent exposures in excess of 5 mppcf. Ex. 1412, at 13–20. Later, in 1951, the United States informed all government contractors under the Walsh-Healey Public Contracts Act that asbestos exposures above 5 mppcf could be hazardous, and required contractors to control exposure levels. Ex. 1573, at 23–24.

Dr. Gregory, a certified industrial hygienist with uncontested qualifications, offered uncontradicted expert testimony that:

Q. What information would a warning have provided that the employers and jobsite owners didn't already know?

A. Well, right. I mean, they were aware of the Walsh-Healey Act. They were aware of the Industrial Commission of Wisconsin's requirements for the threshold limit value for asbestos. They were aware of engineering controls. They were aware of the hazards of overexposure to asbestos.

....

Q. Would jobsite owners, employee -- employers, premises owners, know about the threshold limit values for asbestos from the Wisconsin Industrial Commission orders?

A. Yes.

Q. Would they know about it from the Walsh-Healey Act?

A. They should have known. When you hire someone or when you put out a contract for someone to do work on your property or if you're a general contractor and you're hiring a subcontractor, you have the obligation and the duty to make sure that you're aware of all occupational safety health standards that apply to that operation and to make sure that your subcontractors are complying with those safety and health regulations.

Q. Would that include L&S Insulation at Badger Ordinance?

A. Yes, it would.

Q. Would that include the United States of America at Badger Ordinance?

A. Yes, it would.

Q. Would that include O[lin] Corporation, the controller of Badger Ordinance?

A. Yes, it would.

Trial Tr. 2-P-112:8-114:15, 2-P-108:25-109:22.

In fact, Mr. Borchardt, the president of L&S Insulation for whom Mr. Suoja worked at Badger Ordnance Works, testified that masks were available since the 1950s. Elmer Borchardt Dep. 42-43, dkt. 185. Because Mr. Suoja's employers already knew these things

at Badger Ordnance Works, Owens-Illinois did not have a duty to provide a warning. *Haase*, 266 Wis. 2d at 983–84; *Strasser*, 236 Wis. 2d at 459–60; *see also* Wis. JI-Civil 3242 (Negligence); Wis. JI-Civil 3262 (Strict Liability).

**E. Owens-Illinois Did Not Waive Its Affirmative Defenses.**

Contrary to plaintiff's argument (Pl.'s Post-Trial Br. 119–120), Owens-Illinois affirmatively pled and did not waive its defenses on statute of limitations and sophisticated user. On November 12, 1999, Owens-Illinois filed a short form answer and affirmative defenses (dkt. 4), which explicitly incorporated by reference the Asbestos Defendant's Master Affirmative Defenses, including any amendments and supplements, under the Order for Pleadings in Cases Which Contain Asbestos-Related Personal Injury Claims, *In Re: Asbestos Litigation*, Misc. Docket No. 86-0457 (E.D. Pa. Aug. 20, 1986), and Pretrial Order No. 1, *In Re: Asbestos Products Liability Litigation* (No. VI), No. MDL 857 (E.D. Pa. Sept. 18, 1991). *See* Fed. R. Civ. P. 10(c) ("A statement in a pleading may be adopted by reference ... in any other pleading").

The Asbestos Defendants' Amended Master Affirmative Defenses state a defenses based on statute of limitations and sophisticated user:

**SECOND DEFENSE**

Plaintiff's claims are barred in whole or in part by the applicable Statute of Limitations and the doctrine of laches.<sup>18</sup>

....

---

<sup>18</sup> It is well-established that, "[w]hile a limitations defense must 'be asserted in a responsive pleading,' it 'need not be articulated with any rigorous degree of specificity,' and is 'sufficiently raised for purposes of Rule 8 by its bare assertion.'" *Zotos v. Lindbergh Sch. Dist.*, 121 F.3d 356, 361 (8th Cir. 1997) (collecting federal appellate court authorities).



TWENTIETH DEFENSE

If plaintiff sustained any injuries as a result of the use of any asbestos-containing product manufactured or sold by defendants, such injuries were proximately caused by the acts or omissions of plaintiff's employers, who were sophisticated purchasers, in failing to take adequate precautions, failing to provide plaintiff with a safe work place; and failing to warn plaintiff of any health hazards that may have been associated with exposure to or contact with any asbestos-containing-product of defendants.

Brian Watson Decl. Ex. 3, at 1, 6.

There is no waiver. In fact, the plaintiff was well-aware of these defenses for seventeen years, and he withdrew a motion to compel a more specific pleading under Rule 8(c) in this case more than four years ago. Order 1, Nov. 21, 2011, E.D. Pa. No. 2:09-cv-60256-ER, dkt. 31, *available at* <http://goo.gl/J1phWl>. Nor has the plaintiff been harmed by any delay. As the Seventh Circuit has held, “the ‘rule that forfeits an affirmative defense not pleaded in the answer (or by an earlier motion) is, we want to make clear, not to be applied rigidly.’ ‘The failure to plead an affirmative defense in the answer works a forfeiture only if the plaintiff is harmed by the defendant's delay in asserting it.” *Matthews v. Wisconsin Energy Corp.*, 642 F.3d 565, 570 (7th Cir. 2011) (citation omitted). For these reasons, the plaintiff's forfeiture argument is unavailing and unsupported by any legal basis.

**F. Owens-Illinois Has Preserved Its Arguments on Summary Judgment.**

Owens-Illinois acknowledges that the Court denied its arguments at summary judgment that: 1) the Court lacks jurisdiction because the plaintiff does not have standing to maintain this action; 2) this action is moot because, as plaintiff admitted, there is no controversy left to be resolved by the Court; and 3) the claims against Owens-Illinois are

precluded because the issue of exposure to Owens-Illinois Kaylo insulation products was contested in the prior state court action and decided by a valid final judgment. To preserve these issues for review, Owens-Illinois incorporates those arguments by reference here, and requests dismissal of the plaintiff's claims on the same grounds. Def.'s Mot. Summ. J., dkt. 89; Def.'s Reply Mot. Summ. J., dkt. 111.

**V. PROCEDURAL AND EVIDENTIARY OBJECTIONS**

The plaintiff's post-trial brief is littered with his reliance on inadmissible evidence. Pursuant to the Court's directions and the parties' agreement at trial (Trial Tr. 2-P-150:6-151:17, 3-P-12:14-13:25), Owens-Illinois reserved its objections for post-trial briefing. Owens-Illinois therefore submits the following objections and requests the following parts of the record be stricken.

**A. Undesignated Prior Testimony**

Owens-Illinois objects to all prior testimony that was not timely designated for use at trial. The plaintiff and Owens-Illinois submitted their designations of prior testimony to the Court (dkt. 172) and confirmed that the record was closed on December 2, 2015:

MR. MCCOY: ... Just clarification. So on the depositions though, the past testimony, we do need to have the page and lines fixed today, and I think everybody has done that, because that makes differences as to what we do and they do and then counters. And that's it.

THE COURT: Sure.

MR. MCCOY: That should be it.

THE COURT: I want the designations clear today for the attorneys' benefit. That's part of what I just said in terms of closing the record....

....

THE COURT: Understood. But I just want to confirm with Mr. McCoy on the record that you agree with Mr. Casmere that we now have all of the

evidence in, the evidentiary record is closed, and the parties are ready to brief.

MR. MCCOY: That's correct, Judge.

Trial Tr. 3-P-17:2-28:21.

Accordingly, the Court should strike the following undesignated prior testimony from the record:

- the trial transcripts in *Humphreys v. Owens-Illinois, Inc.* (dkt. 166-170, 160-163, 157-158)
- the deposition transcript of Arthur Frank, MD, PhD (dkt. 165)
- the deposition transcript of Thomas Wiig, MD (dkt. 164)
- the deposition transcript of Earl Gregory, PhD, CIH, who testified live at trial (dkt. 159)
- the affidavits of Elmer Borchardt (dkt. 144).

*See Filipowicz v. Am. Stores Ben. Plans Comm.*, 56 F.3d 807, 814 (7th Cir. 1995) (affirming district court where “it would be fundamentally unfair to reopen the proofs to permit this witness to testify when the problem we face right now is of [the party’s] own making”); *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 401 U.S. 321, 331 (1971) (affirming district court because “a motion to reopen to submit additional proof is addressed to his sound discretion”).

### **1. Humphreys Trial**

Assuming, for the sake of argument, that the Court considers the undesignated trial transcripts in *Humphreys v. Owens-Illinois, Inc.* (dkt. 166-170, 160-163, 157-158), Owens-Illinois also objects and moves to strike the transcripts on hearsay and relevance grounds. Fed. R. Evid. 402, 803.

**2. Arthur L. Frank, MD, PhD**

Assuming, for the sake of argument, that the Court considers the undesignated deposition testimony of Arthur Frank, MD, PhD (dkt. 165), Owens-Illinois objects on several additional grounds and requests his testimony after page 19 be stricken from the record.<sup>19</sup>

**a. Dr. Frank's testimony far exceeded his expert report.**

First, Dr. Frank's deposition testimony far exceeded his written report. Fed. R. Civ. P. 26(a)(2)(B), 37(c)(1). Federal Rule of Civil Procedure 26(a)(2)(B) requires a written expert report to contain, among other things, "a complete statement of all opinions the witness will express and the basis and reasons for them." Fed. R. Civ. P. 26(a)(2)(B); *Salgado v. Gen. Motors Corp.*, 150 F.3d 735, 741 n.6 (7th Cir. 1998) ("Rule 26(a) expert reports must be detailed and complete." (quotations omitted)). The expert report "must include 'how' and 'why' the expert reached a particular result, and not merely the expert's conclusory opinions." *Ciomber v. Coop. Plus, Inc.*, 527 F.3d 635, 641 (7th Cir. 2008) (quoting *Salgado*, 150 F.3d at 741 n.6).

Where an expert fails to explain the methodologies and principles supporting his opinion in the report, the district court may "conclude that the report offered nothing of

---

<sup>19</sup> Owens-Illinois did not depose Dr. Frank during pretrial discovery. Instead, Owens-Illinois relied on his expert report. On November 25, 2015, the plaintiff noticed and took Dr. Frank's deposition because he allegedly could not attend trial. See Frank Dep. 1, dkt. 165. As Owens-Illinois made clear at the deposition, Dr. Frank's testimony far exceeded his expert report. *Id.* at 19:12-21 ("MR. CASMERE: ... I would like a continuing objection on Rule 26 and disclosure. MR. McCOY: Okay. I mean, you can have a continuing objection on Rule 26.").

value to the judicial process.” *Minix v. Canarecci*, 597 F.3d 824, 835 (7th Cir. 2010) (citing *Wendler & Ezra, P.C. v. Am. Int’l Grp., Inc.*, 521 F.3d 790, 791 (7th Cir. 2008)). In fact, the expert report “must be sufficiently complete to satisfy the criteria of the *Daubert* decision, and one of those criteria, as we have been at pains to emphasize, is that the expert show how his conclusion is grounded in—follows from—an expert study of the problem.” *Smith v. Sofamor, S.N.C.*, 21 F. Supp. 2d 918, 922 (W.D. Wis. 1998).

Dr. Frank’s report fell well below these standards and did not disclose the opinions elicited at his deposition. On August 13, 2012 (dkt. 202-5), the plaintiff served a cursory, one-page report from Dr. Frank (Arthur Frank, MD, PhD Rep. 1, dkt. 27-1). Dr. Frank provided two conclusory opinions and offered no scientific bases or reasons for them:

- (1) a causation opinion that “Mr. Suoja developed and then died from, a malignant peritoneal mesothelioma that was caused by his exposures to asbestos. The cumulative exposures he had to asbestos, from any and all products containing any and all fiber types, would have been contributory to his developing this cancer.”
- (2) a state-of-the-art opinion that “the hazards of asbestos have been known for more than a century, and the need to protect individuals written about some eighty years ago.”

*Id.*

Apparently recognizing this deficiency – and more than two years later – plaintiff filed a 28-page, 73-paragraph affidavit from Dr. Frank. *See* Arthur Frank, MD, PhD Aff. 1-28, dkt. 22-3. Besides being untimely, Dr. Frank added entirely new opinions and vastly expanded the bases and reasons for his opinions. *Id.*

Even though the plaintiff styled Dr. Frank’s affidavit as a “supplement,” it was not: Dr. Frank had signed the affidavit on June 21, 2012, approximately two months *before*

the expert report deadline and *before* his original expert report. *Id.* at 18. In his deposition, Dr. Frank also admitted he did not prepare the affidavit for this case, he used the affidavit for other cases, and the affidavit was “generic.” Frank Dep. 100:21–101:3, dkt. 165. Further, Dr. Frank disclaimed any specific causation opinion in his affidavit, i.e., “whether an exposure to a substance or substances has caused or contributed to the development of a particular individual’s injury or disease.” Frank Aff. at 19, ¶ 39. The plaintiff simply cannot rely on Dr. Frank’s affidavit, which was not a proper disclosure in this case.

Nor was this plaintiff’s first disclosure violation. Earlier in the case, the MDL 875 court struck the plaintiff’s supplemental expert report and sanctioned his attorneys for willful disclosure violations. *In re Asbestos Prods. Liab. Litig.*, 289 F.R.D. 424, 427 (E.D. Pa. 2013) (including *Suoja* in case list). As the MDL 875 court explained, a supplemental expert report under “Rule 26(e) is not an avenue to correct ‘failures of omission because the expert did an inadequate or incomplete preparation,’ add new opinions, or ‘deepen’ or ‘strengthen’ existing opinions.” *Id.* at 425 (citations omitted). The MDL 875 court concluded, in its lengthy order, “While we hesitate to assign willfulness to any counsel who appears before us representing truly injured parties, we have no difficulty making such a conclusion here where CVLO, throughout the litigation of these cases, has been repeatedly reminded of its obligations to follow the scheduling orders and to provide complete and timely discovery.” *Id.* at 427 (citing prior discovery violations). The same has occurred here.

Pursuant to Rule 37(c)(1), untimely expert opinions are automatically excluded unless the proponent can show the disclosure violation was justified or harmless. The plaintiff's late addition of Dr. Frank's new opinions was neither justified nor harmless, and no explanation has been given for withholding a 28-page affidavit for two years past the disclosure deadline. *Salgado*, 150 F.3d at 742. The prejudice against Owens-Illinois in failing to disclose the opinions timely and their bases is palpable. See *Tribble v. Evangelides*, 670 F.3d 753, 760 (7th Cir. 2012); *David v. Caterpillar, Inc.*, 324 F.3d 851, 857 (7th Cir. 2003). And nothing in this record shows that the plaintiff's failure to disclose Dr. Frank's new opinions and their bases was substantially justified. *Rossi v. City of Chicago*, 790 F.3d 729, 738 (7th Cir. 2015); *Novak v. Board of Trs. of So. Ill. Univ.*, 777 F.3d 966, 972 (7th Cir. 2015). The MDL 875 court and this Court were clear that failure to comply with expert deadlines and procedures could result in striking the testimony. *In re Asbestos Prods.*, 289 F.R.D. at 427; Scheduling Order, dkt. 17.

Because Dr. Frank's testimony went far beyond his one-page expert report and plaintiff cannot rely on the improperly disclosed opinions in his affidavit, the Court should strike Dr. Frank's testimony after page 19 on the deposition transcript.

**b. Dr. Frank's testimony violated *Daubert* standards.**

Second, Dr. Frank's deposition testimony violated the Court's pretrial ruling and the admissibility standards under *Daubert* and Federal Rule of Evidence 702. As explained in extensive briefing, Dr. Frank's opinion rests on the unscientific theory that any exposure to asbestos, no matter how slight, remote, or insignificant, is a substantial contributing factor in causing disease. Def.'s Mot. Bar, dkt. 27; Def.'s Reply, dkt. 69; Def.'s

Suppl. Auth., dkt. 72; Def.'s Suppl. Auth., dkt. 79. The Court granted Owens-Illinois's motion to exclude this "any exposure" theory and any causation opinions based on this theory. Opinion & Order, dkt. 82; Def.'s Mot. Bar 1, 19, dkt. 27.<sup>20</sup>

The plaintiff now argues, in an effort to avoid the Court's *Daubert* ruling, that Dr. Frank's causation opinion is called a "cumulative exposure" theory and not an "any exposure" theory. See Pl.'s Br. 82, dkt. 201. That argument is sophistry. The issue is not whether Dr. Frank uses the words "any exposure," "cumulative exposure," or any other term he may invent. Instead, "it is the soundness and care with which the expert arrived at her [or his] opinion." *C.W. ex rel. Wood v. Textron, Inc.*, 807 F.3d 827, 834 (7th Cir. 2015) (quoting *Schultz v. Akzo Nobel Paints, LLC*, 721 F.3d 426, 431 (7th Cir. 2013)).

Owens-Illinois's motion, and the order excluding Dr. Frank's causation opinion, focused on the basis for his opinion. That basis — indeed, the only disclosed basis — fails the exacting standards under *Daubert* and Federal Rule of Evidence 702. *Textron*, 807 F.3d at 834–35. As Dr. Frank admits, his opinion is always one of causation as long as there is any exposure from a given source because every exposure is part of an individual's cumulative exposure. Frank Dep. 85:16–86:4, dkt. 165. Whatever the alleged exposure — as long as there is one — will always be enough for Dr. Frank to give a causation opinion. *Id.* That is, in fact, the entire point of Dr. Frank's causation opinion: it can be used to inculcate any defendant, based on any product exposure, in any amount. *Id.* at 99:16–

---

<sup>20</sup> As stated in black and white, Owens-Illinois moved "to exclude the 'any exposure' theory of causation, and any opinions based on this theory, offered by plaintiffs' experts, Arthur Frank, M.D." Def.'s Mot. Bar 1, 19, dkt. 27.



100:2. The fact that the law requires a “substantial” contributing factor is no barrier because Dr. Frank redefines “substantial” to mean “any.” *Id.* at 99:13–14.

While Dr. Frank admits that it is scientifically possible to perform “a dose reconstruction ... to estimate what the exposure was” (*id.* at 69:21–23), he performed no scientific study of Mr. Suoja’s exposure at all. There is nothing in Dr. Frank’s expert report about when, where, how much, or how often Mr. Suoja was exposed to asbestos. Frank Rep. 1, dkt. 27-1. There is nothing about exposure to asbestos from Owens-Illinois Kaylo or any other company’s product. *Id.* None of that information matters to Dr. Frank in reaching his causation opinion. Frank Dep. 85:25–86:4, dkt. 165. Indeed, Dr. Frank would supply a causation opinion if you “plug” any hypothetical exposure into the case. *Id.* at 99:23–100:2. Where, as here, the expert “supplies nothing but a bottom line,” the expert also “supplies nothing of value to the judicial process” and his testimony should be excluded. *Wendler & Ezra*, 521 F.3d at 791; *Minix*, 597 F.3d at 835.

Just last year, the plaintiff’s attorneys tried to avoid a similar *Daubert* order barring Dr. Frank in the Northern District of Illinois. There, too, they obtained the same cursory report from Dr. Frank. See Arthur Frank Rep. 1, dkt. 66-2, available at <http://goo.gl/502bja>. There, too, Dr. Frank opined that “the cumulative exposures he had to asbestos, from any and all products, containing any and all fiber types, would have contributed to his developing [lung cancer].” *Id.* There, too, the court excluded Dr. Frank’s causation opinion, and the plaintiff’s attorneys tried to rename the opinion from “any exposure” to “cumulative exposure.” The court rejected the plaintiff’s argument, explaining that Dr. Frank’s “‘cumulative exposure’ testimony was no different than the

[any exposure] testimony proffered at the *Daubert* stage.” *Krik v. Owens-Illinois, Inc.*, No. 10-CV-07435, 2015 WL 5050143, at \*1 (N.D. Ill. Aug. 25, 2015) (citing *Krik v. Crane Co.*, 76 F. Supp. 3d 747, 752–55 (N.D. Ill. 2014)).

The court further explained, after a full *Daubert* hearing and *voir dire* of Dr. Frank, that his “cumulative exposure” testimony is based entirely on his “any exposure” testimony:

For testimony about cumulative exposure causing lung cancer to be useful testimony for this trial, for this jury, as to these defendants, it needs to be related to whether the exposure at the hands of these defendants caused plaintiff’s lung cancer, which is what this trial is about.

As was clear when Judge Lee said that it is not an acceptable approach for a causation expert to take [*Krik*, 76 F. Supp. 3d at 752–55], namely, to draw a causation opinion as to particular defendants, including hypothetical defendants in response to a hypothetical question, for that causation expert to take an approach based on cumulative exposure that’s informed by an each-and-every-exposure opinion, it remains clear to me in light of the factual proffer that **Dr. Frank’s cumulative exposure testimony is based on the each-and-every-exposure theory above - - exposure meaning above background amounts and that that testimony is based on each and every exposure being a substantial factor.**

And just as Dr. Frank, to his credit, cannot disaggregate exposures as a matter of science, cumulative exposure opinion cannot be disaggregated from the each-and-every-exposure opinion as a matter of evidence under Rule 702, and now that I’ve heard the proffer, under Rule 403.

Dkt. 80, Trial Tr. Vol 2, 353:22–356:24, *Krik v. Crane Co.*, No. 10 C 7435 (N.D. Ill. Apr. 21, 2015); *see also id.* at 258:23–280:19 (*voir dire*).

Here, as in *Krik*, Dr. Frank conceded that his “cumulative exposure” theory is no different than his “any exposure” theory:

Q. You touched on this towards the end of your direct examination, but essentially it's your opinion that the only exposure that a person has

that is not causative in their asbestos-related disease is the exposure that they didn't have it?

A. Right. If they didn't have it, it couldn't cause it.

Q. But if they have an exposure, no matter how slight, no matter how minimal, your opinion is that that is part of the cause of the disease?

A. It's part of their cumulative exposure.

Q. And thus the cause?

A. And thus the cause because it is the cumulative exposure that is the cause.

Q. And that's true in your mind and in your opinion even for a single exposure on a single day?

....

A. The answer is yes.

Frank Dep. 97:17-99:15, dkt. 165.

For these reasons, and the reasons in its pretrial briefing, Owens-Illinois objects to Dr. Frank's testimony under *Daubert* and Federal Rule of Evidence 702, and requests his testimony after page 19 on the deposition transcript be stricken from the record. *Krik*, 2015 WL 5050143, at \*1 (citing *Krik*, 76 F. Supp. 3d at 752-55); *see also* Def.'s Mot. Bar, dkt. 27; Def.'s Reply, dkt. 69; Def.'s Suppl. Auth., dkt. 72; Def.'s Suppl. Auth., dkt. 79; Def.'s Trial Br. 9-13, dkt. 135.

### **3. Thomas Wiig, MD**

Assuming, for the sake of argument, that the Court considers the undesignated deposition testimony of Thomas Wiig, MD (dkt. 164), Owens-Illinois also objects to his testimony on any topic other than his laparoscopic surgery and requests the remaining testimony be stricken from the record. Specifically, the Court should strike Dr. Wiig's improper expert testimony about causation and diagnosis. Wiig Dep. 34:25-35:16; *see also* Pl.'s Post-Trial Br. 78-79.

The plaintiff disclosed Dr. Wiig only as a non-retained, treating physician under Rule 26(a)(2)(C). Dr. Wiig therefore did not prepare a written expert report. While the plaintiff served a Rule 26(a)(2)(C) disclosure for Dr. Wiig, it contained nothing about the facts to which he was expected to testify. Wiig Dep. 81:25–82:5.

Dr. Wiig was the general surgeon who performed Mr. Suoja's laparoscopy in 1996. Wiig Dep. 44:15–19. Nothing in Dr. Wiig's treatment required him to determine the cause of Mr. Suoja's disease. *Id.* at 51:25–52:3. Dr. Wiig was not Mr. Suoja's oncologist, pathologist, radiologist, or primary care physician. *Id.* at 44:7–14. Moreover, Dr. Wiig admitted that he is not an expert in asbestos-related diseases and that he does not keep current on medical or scientific literature on asbestos-related diseases. *Id.* at 46:9–23. Dr. Wiig is not even aware of the diagnostic criteria for mesothelioma, and he does not have the qualifications to diagnose mesothelioma. *Id.* at 50:7–9, 53:22–54:7.

Pursuant to Rule 37(c)(1), the Court should strike Dr. Wiig's deposition testimony that exceeded his laparoscopic surgery. As the Seventh Circuit has held, a treating physician who is offered to provide expert testimony, "but who did not make that determination in the course of providing treatment, should be deemed one 'retained or specially employed to provide expert testimony in the case,' and thus is required to submit an expert report." *Meyers v. Nat'l R.R. Passenger Corp.*, 619 F.3d 729, 734–35 (7th Cir. 2010). The purpose of this requirement is "to provide adequate notice of the substance of the expert's forthcoming testimony and to give the opposing party time to prepare for a response." *Id.* at 734. Here, *Meyers* dictates that Dr. Wiig's testimony beyond

his laparoscopic surgery is inadmissible and should be stricken from the record. *Id.*; Fed. R. Civ. P. 37(c)(1).

**4. Earl D. Gregory, PhD, CIH**

Dr. Gregory testified live at trial. References to his undesignated deposition testimony are therefore unnecessary. The plaintiff's counsel was free to cross-examine Dr. Gregory at trial. Assuming, for the sake of argument, that the Court considers the undesignated deposition transcript of Earl D. Gregory, PhD, CIH (dkt. 159), Owens-Illinois further objects to the testimony on hearsay and relevance grounds and requests the testimony be stricken from the record. Fed. R. Evid. 402, 803.

**5. Elmer Borchardt**

Assuming, for the sake of argument, that the Court considers the undesignated affidavits of Elmer Borchardt (dkt. 144), Owens-Illinois further objects to the affidavits on hearsay and relevance grounds and requests the affidavits be stricken from the record. Fed. R. Evid. 402, 803.

**B. Designated Prior Testimony**

Additionally, Owens-Illinois objects to the testimony that plaintiff timely designated at trial (Pl.'s Design. Prior Test., dkt. 172) and requests the following testimony be stricken from the record.

**1. George Schlub**

Owens-Illinois objects on the following grounds to George Schlub's deposition testimony (George Schlub Dep., dkt. 154), which plaintiff designated for use at trial (Pl.'s Design. Prior Test. 1-2, dkt. 172).

**Plaintiff's Designations**      **Owens-Illinois's Objections**

6:16-33:20	10:18-11:10	Lack of foundation; vague; ambiguous; overbroad
	12:13-14:14	Lack of foundation; compound; vague; ambiguous; overbroad
	12:17-14:7	Lack of relevance as to colloquy
	15:6-15:15	Lack of foundation; compound
	15:16-15:20	Compound; leading
	15:21-16:1	Compound; vague; ambiguous; overbroad
	16:2-16:13	Lack of foundation; calls for speculation; compound
	17:12-17:16	Lack of foundation; calls for speculation; overbroad
	18:24-19:10	Lack of foundation; and calls for speculation
	19:11-19:24	Lack of foundation; calls for speculation; vague
	20:18-21:6	Lack of foundation; calls for speculation; vague; ambiguous; overbroad
	21:7-22:3	Lack of foundation; calls for speculation; compound
	22:15-22:21	Vague; ambiguous; overbroad
	22:22-23:20	Lack of foundation; hearsay; calls for speculation; calls for expert opinion; vague; ambiguous; overbroad
	24:12-25:3	Lack of foundation; calls for speculation; calls for expert opinion; vague; ambiguous; overbroad
	25:4-25:21	Lack of foundation; hearsay; calls for speculation; lack of relevance
	26:12-26:15	Lack of relevance as to colloquy
	33:10-33:11	Nonresponsive
34:21-35:4		No additional objection
35:22-36:5		No additional objection
36:19-37:2	36:24-37:2	Nonresponsive
41:20-43:8		No additional objection
44:3-44:9	44:3-44:9	Nonresponsive; no question pending

**2. Lawrence Zimmer**

Owens-Illinois objects on several grounds to Lawrence Zimmer's deposition testimony (Lawrence Zimmer Dep., dkt. 155-156), which plaintiff designated for use at trial (Pl.'s Design. Prior Test. 2, dkt. 172).

The plaintiff's counsel stipulated at Mr. Zimmer's deposition that he would testify against only two defendants, Westinghouse and Georgia-Pacific. As plaintiff's counsel made clear, "These two [Westinghouse and Georgia-Pacific] are the two that are here for real defendants. I don't need to talk to anyone else really. You don't need anything really. He's given no testimony against you, and he's not going to." Lawrence Zimmer Dep. 82:1-82:6, dkt. 156.<sup>21</sup>

Mr. Zimmer did not identify an Owens-Illinois product as one used at Badger Ordnance Works (*id.* at 10:16-93:15) and testified that he worked at Badger Ordnance Works in late 1958 (*id.* at 25:17), which is only *after* Owens-Illinois sold the Kaylo business to a separate company, Owens-Corning Fiberglas, who thereafter manufactured and sold Kaylo into the 1970s. Thus, Mr. Zimmer's testimony should be stricken from the record based on counsel's own stipulation. *See, e.g., Standard Fire Ins. Co. v. Knowles*, 133 S. Ct. 1345, 1348 (2013) ("Stipulations must be binding."); *Cleveland Hair Clinic, Inc. v. Puig*, 200 F.3d 1063, 1068 (7th Cir. 2000) (same); *Analytical Eng'g, Inc. v. Baldwin Filters, Inc.*, 425 F.3d 443, 453 (7th Cir. 2005) (same). Identification of a product made by Owens Corning Fiberglas is irrelevant to the plaintiff's claim against Owens-Illinois.

Additionally, Owens-Illinois objects on the following specific grounds to Mr. Zimmer's deposition testimony:

<b>Plaintiff's Designations</b>	<b>Owens-Illinois's Objections</b>
-------------------------------------	--

10:14-14:7	11:6-13:2	Lack of relevance
------------	-----------	-------------------

---

<sup>21</sup> Plaintiff's counsel also represents Mr. Zimmer, who was deposed in his own case and more than 40 other consolidated cases. *See* Zimmer Dep. 42:3-44:18.

21:23-27:12	21:23-27:12	Lack of foundation; lack of relevance as nothing is related to Mr. Zimmer's work with or around Oswald Suoja
	22:7-23:12	Lack of foundation; vague; ambiguous; overbroad as to place and time
	23:20-25:12	Lack of foundation; vague; ambiguous; overbroad as to place and time
	22:12-22:14	Asked and answered
	23:5-23:11	Lack of foundation; vague; ambiguous; overbroad as to place; time; and "Kaylo" product
	23:13-23:17	Compound
	23:17-23:19	Compound
	23:23-24:5	Compound; lack of foundation; vague; ambiguous; overbroad
	25:22-26:2	Lack of foundation; calls for speculation as Mr. Zimmer admits that he did not perform the work or help remove "Kaylo" at Badger Ordnance Works (26:21-24)
	26:5-26:9	Lack of foundation; calls for speculation
	27:15-27:20	Compound; lack of foundation; calls for speculation
	27:4-27:6	Compound
54:4-54:17	54:4-54:11	Leading
	54:10-54:11	Lack of foundation; vague; ambiguous; overbroad as to "50s like you were"
	54:12-54:15	Lack of foundation; compound; vague; ambiguous; overbroad; calls for speculation
	54:15	Nonresponsive portion
	54:16-54:17	Lack of foundation; calls for speculation
57:21-59:3	57:21-57:25	Lack of foundation; hearsay
81:13-81:25	81:13-81:25	Lack of relevance as to colloquy

### 3. Elmer Borchardt

Owens-Illinois objects on relevance grounds to Elmer Borchardt's deposition testimony on July 2, 2008 (Elmer Borchardt Dep., dkt. 172), which plaintiff designated for use at trial (Pl.'s Design. Prior Test. 5, dkt. 172).

Mr. Borchardt testified that L&S Insulation Co.'s files "were given to whoever needed them or wanted to look at them" and were not available "today." Elmer Borchardt



Dep. 42:25–43:22, dkt. 172. That testimony is irrelevant because it has no tendency to make a fact more or less probable and because it has no consequence in deciding this action. Fed. R. Evid. 402. Accordingly, Owens-Illinois requests that the Court strike the deposition testimony from the record.

**4. Michael Dowling**

Owens-Illinois objects on hearsay grounds to Michael Dowling’s trial testimony (Michael Dowling Dep., dkt. 146), which plaintiff designated for use at trial (Pl.’s Design. Prior Test. 10, dkt. 172). Mr. Dowling’s testimony is hearsay, and does not satisfy the former testimony exception, since plaintiff has not shown that Mr. Dowling was unavailable to testify in this case, Owens-Illinois (or its predecessor in interest) was not involved at all in that prior trial, and the parties did not have a similar motive to develop the testimony as Owens-Illinois. Fed. R. Evid. 804(b)(1); *United States v. Feldman*, 761 F.2d 380, 385 (7th Cir. 1985).

According to the trial transcript, Mr. Dowling was the controller of Sprinkmann Sons Corporation—the only defendant at trial—and was called as an adverse witness by plaintiff. Michael Dowling Tr. Test. 1–3. Nothing in the trial transcript shows that plaintiff had a similar motive to develop Mr. Dowling’s testimony as Owens-Illinois, including (1) the type of proceeding in which his testimony was given, (2) the trial strategy, (3) the potential financial stakes, and (4) the number of issues and parties. *Feldman*, 761 F.2d at 385. Therefore, Owens-Illinois requests that the Court strike Michael Dowling’s trial testimony from the record.

**5. Donald Popalisky (June 13, 1980)**

Owens-Illinois objects on hearsay grounds to Donald Popalisky's deposition testimony on June 13, 1980 (Donald Popalisky Dep., dkt. 178), which plaintiff designated for use at trial (Pl.'s Design. Prior Test. 10-11, dkt. 172). Mr. Popalisky's testimony is hearsay, and does not satisfy the former testimony exception, since plaintiff has not shown that Mr. Popalisky was unavailable to testify in this case, Owens-Illinois (or its predecessor in interest) was not involved in the deposition, and the parties did not have a similar motive to develop the testimony as Owens-Illinois. Fed. R. Evid. 804(b)(1); *Feldman*, 761 F.2d at 385.

According to the transcript, Mr. Popalisky was the president of Building Services Industrial Sales Co. and was called by defendant Eagle-Picher Industries to fault Owens-Illinois and Owens Corning Fiberglas. Donald Popalisky Dep. 1-9. Neither Owens-Illinois nor Owens Corning Fiberglas was a defendant in the case, and nothing in the transcript shows that defendant Eagle-Picher Industries had a similar motive to develop Mr. Popalisky's testimony as Owens-Illinois. *Feldman*, 761 F.2d at 385. Thus, Owens-Illinois requests that the Court strike Mr. Popalisky's June 13, 1980 deposition testimony from the record.

Additionally, Owens-Illinois makes the following specific objections to Mr. Popalisky's deposition testimony:

<b>Plaintiff's</b>	<b>Owens-Illinois's</b>
<b>Designations</b>	<b>Objections</b>

3:20-3:21	3:20-3:21	Lack of relevance
-----------	-----------	-------------------

4:03-4:08	4:03-4:08	Lack of relevance
4:13-4:20	4:13-4:20	Lack of relevance
7:07-7:14	7:07-7:14	Lack of relevance
7:19-7:21	7:19-7:21	Lack of relevance
8:10-9:08	8:10-9:08 8:23-9:08	Lack of relevance Calls for speculation; lack of foundation; vague; ambiguous; overbroad as to the type of "products"

**6. Donald Popalisky (March 17, 1987)**

Owens-Illinois objects on the following grounds to Donald Popalisky's deposition testimony on March 17, 1987 (Donald Popalisky Dep., dkt. 179), which plaintiff designated for use at trial (Pl.'s Design. Prior Test. 11, dkt. 172).

**Plaintiff's      Owens-Illinois's  
Designations    Objections**

20:02-20:11	20:2-20:11 20:2-20:4 20:5-20:11	Lack of relevance Misstates prior testimony; vague; ambiguous; overbroad as to "deal" Lack of foundation; vague; ambiguous
63:11-63:17	63:11-63:17	Lack of relevance; lack of foundation; vague; ambiguous

**7. Elmer Borchardt (May 12, 2003)**

Owens-Illinois objects on the following grounds to Elmer Borchardt's deposition testimony on May 12, 2003 (Elmer Borchardt Dep., dkt. 187), which plaintiff counter-designated at trial (Pl.'s Design. Prior Test. 15, dkt. 172).

**Plaintiff's      Owens-Illinois's  
Designations    Objections**

9:23-10:25	10:11-10:16	Nonresponsive
15:22-18:25	17:4-18:2 18:3-18:25	Lack of foundation; calls for speculation ( <i>see</i> 35:14-36:1) Misstates prior testimony; lack of foundation; nonresponsive

19:17-19:21	No further objection
-------------	----------------------

**8. Richard Grimmie**

Owens-Illinois objects on the following grounds to Richard Grimmie's deposition testimony on September 20 and October 28, 1991 (Richard Grimmie Dep., dkt. 147-148, which plaintiff designated for use at trial (Pl.'s Design. Prior Test. 5-7, dkt. 172).

**Plaintiff's      Owens-Illinois's  
Designations    Objections**

9:07-9:08		No objection
12:15-13:06	Same	Lack of relevance as to plant environment; lack of relevance as to Owens Corning Fiberglas and not Owens-Illinois
13:11-13:22	Same	Lack of relevance as to a plant environment and not a finished product
14:01-16:19	Same	Lack of relevance as to a plant environment and not a finished product
16:24-20:02	Same	Lack of relevance as to a plant environment and not a finished product; lack of relevance as to Owens Corning Fiberglas and not Owens-Illinois; lack of foundation; lack of relevance as to "relationship" between Owens Corning Fiberglas and Owens-Illinois
20:06-20:14	Same	Lack of relevance as to Owens Corning Fiberglas and not Owens-Illinois; lack of relevance as to a plant environment and not a finished product
21:17-22:04	Same	Lack of relevance as to Owens Corning Fiberglas and not Owens-Illinois; Lack of relevance as to a plant environment and not a finished product
22:11 ("Is it...")-22:17	Same	Lack of relevance as to a plant environment and not a finished product; Lack of foundation; overbroad; vague; calls for speculation; calls for expert opinion as to witness's belief
23:16 ("You knew...")-23:18	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation; overbroad; vague; calls for speculation; calls for expert opinion

23:22-23:24	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation; overbroad; vague; calls for speculation; calls for expert opinion
27:20 ("When the Kaylo...")-28:01	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation; overbroad; vague; calls for speculation; calls for expert opinion
29:03-29:12	Same	Lack of foundation; improper refreshing of recollection
29:22-30:08	Same	Lack of foundation; improper refreshing of recollection
30:14-30:20	Same	Lack of foundation; improper refreshing of recollection
31:21-31:25	Same	Lack of foundation; improper refreshing of recollection
43:22-43:23	Same	Lack of foundation; lack of relevance as to a plant environment and not a finished product
44:03-44:09	Same	Lack of foundation; lack of relevance as to a plant environment and not a finished product
44:12-44:14	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation; overbroad; vague; calls for speculation; calls for expert opinion
44:17-44:17	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation; overbroad; vague; calls for speculation; calls for expert opinion
47:14-47:17	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation; overbroad; vague; calls for speculation; calls for expert opinion
48:01-48:05	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation; overbroad; vague; calls for speculation; calls for expert opinion
48:07-48:08	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation; overbroad; vague; calls for speculation; calls for expert opinion
59:10-60:21	Same	Lack of relevance as to a plant environment and not a finished product; lack of relevance as to Owens Corning Fiberglas and not Owens-Illinois
65:08-66:03	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation; calls for speculation; calls for expert opinion

66:06-66:06	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation; calls for speculation; calls for expert opinion
80:07-80:09	Same	Lack of relevance as to a plant environment and not a finished product; Lack of relevance as to witness's health status or his knowledge of latency; calls for expert opinion; lack of foundation for witness's medical opinion as to latency
80:13-81:09	Same	Lack of relevance as to a plant environment and not a finished product; lack of relevance as to witness's health status or his knowledge of latency; calls for expert opinion and lack of foundation for witness's medical opinion as to latency
81:11-81:12	Same	Lack of relevance as to a plant environment and not a finished product; Lack of relevance as to witness's health status or his knowledge of latency; calls for expert opinion; lack of foundation for witness's medical opinion as to latency
81:21-81:22	Same	Lack of relevance as to a plant environment and not a finished product; Lack of relevance as to witness's health status or his knowledge of latency; calls for expert opinion and lack of foundation for witness's medical opinion as to latency; lack of foundation for what witness heard
82:7 ("Were you...")-82:12	Same	Lack of relevance as to a plant environment and not a finished product; lack of relevance as to witness's health status or his knowledge of latency; calls for expert opinion and lack of foundation for witness's medical opinion as to latency
82:25-83:03	Same	Lack of relevance as to a plant environment and not a finished product; lack of relevance as to witness's health status or his knowledge of latency; calls for expert opinion and lack of foundation for witness's medical opinion as to latency
83:06-83:06	Same	Lack of relevance as to a plant environment and not a finished product; lack of relevance as to witness's health status or his knowledge of latency; calls for expert opinion and lack of foundation for witness's medical opinion as to latency

129:21-129:24	Same	Lack of foundation; lack of relevance as to a plant environment and not a finished product
130:07-131:09	Same	Lack of relevance as to a plant environment and not a finished product; relevance; lack of foundation; calls for speculation as to what witness would expect
131:11-131:15	Same	Lack of relevance as to a plant environment and not a finished product; lack of relevance; lack of foundation; and calls for speculation as to what witness would expect
139:14-140:06	Same	Lack foundation and calls for speculation; lack of relevance as to a plant environment and not a finished product
140:09-140:14	Same	Lack foundation and calls for speculation; lack of relevance as to a plant environment and not a finished product
141:09-141:18	Same	Lack foundation and calls for speculation; lack of relevance as to a plant environment and not a finished product
210:4-210:8	Same	Lack foundation and calls for speculation; lack of relevance as to a plant environment and not a finished product
211:10-212:6	Same	Lack foundation and calls for speculation; lack of relevance as to a plant environment and not a finished product
360:04-360:15	Same	Lack of relevance as to a plant environment and not a finished product; lack of relevance as to Owens Corning Fiberglas and not Owens-Illinois
361:17-362:09	Same	Lack of relevance as to a plant environment and not a finished product
368:16-368:20	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation and calls for speculation
369:08-369:11	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation and calls for speculation
369:15-369:16	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation and calls for

		speculation; lack of relevance as to Owens Corning Fiberglas and not Owens-Illinois
370:14-370:22	Same	Lack of relevance as to a plant environment and not a finished product; lack of foundation and calls for speculation; lack of relevance as to Owens Corning Fiberglas and not Owens-Illinois

### C. **Trial Testimony**

Further, Owens-Illinois makes the following objections to testimony plaintiff elicited at trial and requests the testimony be stricken from the record.

#### 1. **Stephen Kenoyer**

Owens-Illinois objects and moves to strike Stephen Kenoyer's entire trial testimony because he lacks the required qualifications under *Daubert* and Federal Rule of Evidence 702, and his trial testimony was not properly disclosed under Federal Rule of Civil Procedure 26(a)(2)(B).

##### a. **Mr. Kenoyer is not qualified.**

"Whether a witness is qualified as an expert can only be determined by comparing the area in which the witness has superior knowledge, skill, experience, or education with the subject matter of the witness's testimony." *Gayton v. McCoy*, 593 F.3d 610, 616 (7th Cir. 2010) (quoting *Carroll v. Otis Elevator Co.*, 896 F.2d 210, 212 (7th Cir. 1990)). The relevant question "is not whether an expert witness is qualified in general, but whether his 'qualifications provide a foundation for [him] to answer a specific question.'" *Id.* at 617 (citation omitted).

Contrary to plaintiff's assertion, Mr. Kenoyer is not qualified to offer expert testimony in the field of industrial hygiene. Trial Tr. 1-A-7:17-18 ("Stephen Kenoyer who



is here. He's industrial hygiene.""). No court in the United States has ever certified or qualified Mr. Kenoyer to testify as an expert in industrial hygiene. Trial Tr. 1-A-105:7-8. Mr. Kenoyer does not have any degrees in industrial hygiene. Trial Tr. 1-A-96:6-15. In fact, Mr. Kenoyer has never taken a course in undergraduate or graduate school that had the name industrial hygiene in the title. Trial Tr. 1-A-96:17-21.

Mr. Kenoyer's own employer does not identify him as an industrial hygienist. Trial Tr. 1-A-103:9-104:16. Mr. Kenoyer is not a certified industrial hygienist, and he has never sat for the certified industrial hygienist examination and never applied for a membership in any professional organization related to industrial hygiene. Trial Tr. 1-A-96:22-97:17. Nor has Mr. Kenoyer ever published a peer-reviewed paper in industrial hygiene. Trial Tr. 1-A-101:14-102:19. In preparing the expert report, Mr. Kenoyer relied on his coworker, Kenneth Garza, who is an actual industrial hygienist and who co-signed the report. Trial Tr. 1-A-108:22-110:9.<sup>22</sup>

Because Mr. Kenoyer is not qualified in the field of industrial hygiene and his testimony is not admissible due to his lack of qualification, Owens-Illinois objects to Mr. Kenoyer's entire trial testimony and requests his testimony be stricken from the record. Fed. R. Evid. 702; *Gayton*, 593 F.3d at 616.

---

<sup>22</sup> Mr. Kenoyer cannot act as a mouthpiece for Mr. Garza. *Dura Auto Sys. of Ind., Inc. v. CTS Corp.*, 285 F.3d 609, 614 (7th Cir. 2002) (Expert "is not permitted to be the mouthpiece of a scientist in a different specialty."); *Loeffel Steel Prods., Inc. v. Delta Brands, Inc.*, 387 F. Supp. 2d 794, 808 (N.D. Ill. 2005) ("[W]hile Rule 703 was intended to liberalize the rules relating to expert testimony, it was not intended to abolish the hearsay rule and to allow a witness, under the guise of giving expert testimony, to in effect become the mouthpiece of the witnesses on whose statements or opinions the expert purports to base his opinion.").

**b. Mr. Kenoyer's testimony was not properly disclosed.**

Assuming, for the sake of argument, that the Court qualifies Mr. Kenoyer as an expert, Owens-Illinois objects to Mr. Kenoyer's trial testimony because the testimony was not properly disclosed during pretrial proceedings. Fed. R. Civ. P. 26(a)(2)(B), 37(c)(1).

During trial, the plaintiff presented the Court with Mr. Kenoyer's "general report" and explained his testimony was based on citations within this "general report." Trial Tr. 1-A-45:24-47:15; Ex. 92 (general report). The MDL 875 court struck Mr. Kenoyer's "general report" as an untimely, improper supplement and sanctioned his attorneys for willful disclosure violations. *In re Asbestos Prods. Liab. Litig.*, 289 F.R.D. 424, 424-27 (E.D. Pa. 2013) (including *Suoja* in case list) ("We conclude that we must strike the Amended Statement from Kenoyer and Garza served on January 24, 2013."). Because plaintiff cannot rely on the improperly disclosed opinions in Mr. Kenoyer's "general report," the Court should strike Mr. Kenoyer's testimony entirely from the record. Fed. R. Civ. P. 37(c)(1); *In re Asbestos Prods.*, 289 F.R.D. at 427.

**2. Gary Suoja**

Owens-Illinois objects on the following grounds to Gary Suoja's trial testimony and requests the testimony be stricken from the record.

**Gary Suoja's      Owens-Illinois's  
Testimony      Objections**

2-A-15:18- 2-A-16:10	Hearsay; calls for speculation; lack of foundation
2-A-18:7- A-19:21	Lack of relevance; hearsay; lack of foundation
2-A-20:7-	Lack of relevance; lack of foundation

2-A-20:10	
2-A-21:12- 2-A-25:10	Lack of relevance; hearsay; lack of foundation
2-A-34:23- 2-A-36:9	Hearsay; lack of foundation; calls for speculation

### 3. Peter Neushul, PhD

Owens-Illinois objects on the following grounds to plaintiff's cross-examination of Peter Neushul, PhD and requests the testimony be stricken from the record.

#### **Peter Neushul's Owens-Illinois's Testimony Objections**

2-P-26:6- 2-P-27:4	Foundation; compound; hearsay
2-P-31:8- 2-P-31:18	Lack of relevance
2-P-62:9- 2-P-70:18	Foundation; hearsay; lack of relevance
2-P-78:22	Transcription error [sic: "crocidolite"; chrysotile]

### D. Exhibits

Owens-Illinois objects to any exhibit that was not timely offered for use at trial. On December 2, 2015, plaintiff and Owens-Illinois identified the exhibits they offered at trial (dkt. 173) and confirmed the record was closed (Trial Tr. 3-P-25:9-30:15). Thus, Exhibit 34 should be stricken from the record and any other exhibit that was not timely offered at trial. *See Filipowicz*, 56 F.3d at 814; *Zenith Radio Corp.*, 401 U.S. at 331.

Additionally, Owens-Illinois objects on the following grounds to plaintiff's exhibits that were timely offered at trial (Pl.'s Exhibits Offered at Trial 4-6, dkt. 173) and moves to strike these exhibits from the record:

<b>Exhibit</b>	<b>Plaintiff's Description</b>	<b>Owens-Illinois's Objections</b>
32	OCF Sales via L&S Insulation and Sprinkmann Sons Corp. to Badger Ordnance Works	Lack of authentication; lack of foundation; hearsay
33	Affidavit of Bruce Carter (Baron & Budd) - OI Kaylo sales records 1950s	Lack of authentication; lack of foundation; hearsay; lack of relevance
35	Picture of sample texture of Pipe covering	Lack of authentication; lack of foundation; lack of relevance
36	Photo of half round insulation pipe covering	Lack of authentication; lack of foundation; lack of relevance
37	Final Saranac Report 1/30/1952	Lack of foundation; lack of relevance
38	Letter dated 3/12/1943 from L. Gardner to U. Bowes	Lack of foundation; lack of relevance
39	Aetna Special Hazards Survey - Dust Survey April 20 and May 2, 1958	Lack of authentication; lack of foundation; hearsay; lack of relevance
42	Declaration of Mark Gardner - Excerpts of Kaylo Advertisement in Petroleum Engineer	Lack of authentication; lack of foundation; hearsay; lack of relevance
54	1956 Industrial Conference Roster	Lack of authentication; lack of foundation; hearsay; lack of relevance
55	1957 Industrial Conference Roster	Lack of authentication; lack of foundation; hearsay; lack of relevance
56	1959 Industrial Conference Roster	Lack of authentication; lack of foundation; hearsay; lack of relevance
57	1960 Industrial Conference Roster	Lack of authentication; lack of foundation; hearsay; lack of relevance
59	Foundation Facts, Vol. 2, No. 4 and Digest of Industrial Hygiene, April 1940	Lack of authentication; lack of foundation; hearsay; lack of relevance
60	Industrial Digest - August 1949	Lack of authentication; lack of foundation; hearsay; lack of relevance

64	NSC Industrial Conference Mailing List, October 1953 to October 1954	Lack of authentication; lack of foundation; hearsay; lack of relevance
65	NSC Industrial Conference Membership, October 1954 to October 1955	Lack of authentication; lack of foundation; hearsay; lack of relevance
66	NSC Industrial Conference Standing Committee Members 1958-1959	Lack of authentication; lack of foundation; hearsay; lack of relevance
79	National Vital Statistics Report Full Life Tables, 2008 - Vol. 61 Number 3 dated 9/24/2012	Lack of relevance
89	Excerpts from Industrial Hygiene Digest, Vol. 13, No. 8, August 1949	Lack of authentication; lack of foundation; hearsay; lack of relevance
91	CV of Stephen Kenoyer	Hearsay; lack of relevance
92	Report of Stephen Kenoyer dated 8/10/2012	Hearsay; lack of foundation; lack of relevance
93	CV of Arthur Frank	Hearsay
94	Report of Arthur Frank dated 8/7/2012	Hearsay
100	CV of Thomas Wiig	Hearsay
121	IHF Membership cards	Lack of authentication; lack of foundation; hearsay; lack of relevance
128	Affidavit of Michael Dowling	Lack of authentication; lack of foundation; hearsay; lack of relevance
136	Opening Statement PowerPoint Presentation	Hearsay; lack of foundation; lack of relevance
137	Stephen Kenoyer PowerPoint Presentation	Hearsay; lack of foundation; lack of relevance
140	Pictures of asbestos fibers	Lack of authentication; lack of foundation; lack of relevance
141	Picture of Macrophages with Asbestos Fibers present	Lack of authentication; lack of foundation; lack of relevance

142	Report of Dr. Arthur Frank – dated 8/7/2012	Hearsay; lack of relevance
205	Industrial Medicine Symposium No. 3, (1938) – Dusts and the Lungs with Particular Reference to Silicosis and Asbestosis - Mereweather	Lack of foundation; hearsay without expert's testimony
207	Markowitz; Asbestos-Related Lung Cancer and Malignancy Mesothelioma of the Pleura (2015)	Lack of foundation; hearsay without expert's testimony
208	Balzer: The Work Environment of Insulating Worker – (1968)	Lack of foundation; hearsay without expert's testimony
209	Cook - Industrial Medicine Industrial Hygiene Section – “Occupational Disease Hazard – Evaluation in the Field” (1942)	Lack of foundation; hearsay without expert's testimony
210	Safety and Health in Shipbuilding and Ship Repairing – “Dust-Producing Potential of Construction Materials” Balzer, Fowler Cooper (1971)	Lack of foundation; hearsay without expert's testimony
217	Lawrence - “The Control of Fumes in the Shipyard” (1943)	Lack of foundation; hearsay without expert's testimony
218	Beyer – “The Mechanical Control of Occupational Diseases”	Lack of foundation; hearsay without expert's testimony
219	Sayers - Industrial Dusts “What Industrial Dusts Are Harmful? Why?” (1937)	Lack of foundation; hearsay without expert's testimony
220	Documentation of Threshold Limit Values – ACGIH – (1962)	Lack of foundation; hearsay without expert's testimony; lack of relevance
222	Documentation of the Threshold Limit Values for Substances in Workroom Air – ACGIH – (1971)	Lack of foundation; hearsay without expert's testimony; lack of relevance

223	Hillerdahl - "Mesothelioma cases associated with non-occupational and low dose exposures" (1999)	Lack of foundation; hearsay without expert's testimony; lack of relevance
224	Iwatsubo "Pleural Mesothelioma Dose Response Relation at Low Levels" (1998)	Lack of foundation; hearsay without expert's testimony; lack of relevance
225	LaCourt - "Occupational and non-occupational attributable risk of asbestos exposure for pleural mesothelioma" (2014)	Lack of foundation; hearsay without expert's testimony; lack of relevance
226	Rodelsperger - "Asbestos and Man-Made Vitreous Fibers as Risk Factors for Diffuse Malignant Mesothelioma" (2001)	Lack of foundation; hearsay without expert's testimony; lack of relevance
227	NIOSH - Criteria for a recommended standard... Occupational Exposure to Asbestos (1972)	Lack of foundation; hearsay without expert's testimony; lack of relevance
229	IHF Digest Vol. 9 No. 1 - Foundation Facts 1/1945 "Asbestosis and Pulmonary Carcinoma" Wedler (1943)	Lack of foundation; hearsay without expert's testimony
230	Stokinger - Industrial Hygiene Association Quarterly Vol. 17 No. 3, September 1956	Lack of foundation; hearsay without expert's testimony; completeness ( <i>see</i> Ex. 1944)
232	IHF Digest	Lack of foundation; hearsay without expert's testimony

VI. CONCLUSION

For these reasons, Owens-Illinois, Inc. requests judgment in its favor and against plaintiff under Federal Rule of Civil Procedure 52.

Dated: April 1, 2016

Respectfully submitted,

By: /s/ Brian O. Watson

Robert H. Riley

Edward Casmere

Joshua D. Lee

Brian O. Watson

Riley Safer Holmes & Cancila LLP

Three First National Plaza

70 W. Madison Street, Suite 2900

Chicago, Illinois 60602

*Attorneys for Defendant*

*Owens-Illinois, Inc.*



**CERTIFICATE OF SERVICE**

I certify that on April 1, 2016, these papers were filed with the Clerk of the Court for the United States District Court for the Western District of Wisconsin using the CM/ECF system, which will send notification of such filing upon all parties who have appeared.

/s/ Brian O. Watson  
Brian O. Watson